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## The World Economy: Seeking New Impetus in the New Normal

Song Guoyou, Director of Center for Economic Diplomacy, Fudan University

The world economy has not been really resuscitated though years have passed since the global financial crisis in 2008. The same is true of 2015's economy—the annual growth rate fails the average expectation and is lower than the 2014's. Growing at a medium and slow rate, the world economy has come to a new normal, which situation requires new push to drive the world economy to a new phase.

#### The New Normal

The world economy is expected to grow at the rate of 3.1% in 2015. The next few years will see no strong growth of 4% and no possible big crises. This is the new normal for the world economy, mediocre but less risky. In addition to the slow growth, the new normal economy includes other features as followings.

First, the emerging economies will contribute less to the world economy while acquiring larger portions. The new economies are slowing down in 2015. And the slowing varies from regions and nations. Asia and the Middle East see no remarkable slumps while the CIS and Latin America's economy plummet sharply. Russia and Brazil are the examples of the emerging economies. The two economies are shrinking and the growth rates are negative, as a consequence of decreased commodity price and unfruitful national economic reform. A slowed growth rate means limited contribution to the world economy. For example, China, the spokesman of the emerging economies, makes a contribution of 30% to the world economy, smaller than the previous years. Though the emerging countries give a not-that-good performance, their growth rates still double their developed counterparts and their economy has surpassed the developed countries last year. Thus, the emerging countries will hold a growing portion of the world economy.

Second, some developed economies are recovering from the crisis and realize moderate growth. Compared with the slowing-down emerging economies, developed ones are slightly speeding up in their 2015 economic growth. Europe and Japan show a growing momentum. This benefits from the super easing monetary policy and depreciating-oriented exchange rate policy. Besides, the falling price of commodity plays an positive part in the Europe's and Japan's recovery. Though

The next few years will see no strong growth of the world economy and no possible big crises. This is the new normal for the world economy, mediocre but less risky. 2015 has not see a strong growth of America's economy, yet its deceased unemployment rate comes to the lowest level since the recession, and the inflation remains restricted. It has a sounder economic foundation than Europe and Japan. The Fed is considering raising the interest rate at the end of the year and bids a farewell to the quantitative easing policy. This bodes well for American recovery. In a word, after bitter and prolonged "de-risk" struggles, the developed economies have come to a stability a period of low increase, low inflation and low risk, during which new growing momentums are accumulating.

Third, the commodity is at a low price, which, however, is not good to all economies. The commodity price plummeted in 2014, such as the price of oil, gold, iron ore, silver, copper and coal. And the prices remain at a low rate in 2015. It is estimated that the commodity price will fluctuate at a low level. This can be attributed to four factors: First, demand. The world economy lacks growth momentums, and thus demands fewer commodities. Second, supply. An influx of capital surged in commodity market in prosperous times and resulted in excess capacity, forcing the price to fall at the supply end. Third, American dollar is appreciating in 2015, leading the dollar-measured commodity price to fall. Fourth, technology advances. The technology advances, especially the one of shale oil gas, increase the output of energy resources by leaps and bounds. The falling of the commodity price casts a pall to the commodity dependent economies, but stimulates the consumption of the commodity importers.

Fourth, while the world trade is recovering at a low pace, the global direct investment is rebounding. In 2015, the world trade is developing with a mere increase of 3.4%, fractionally higher than the years before but still lower than the figures before the financial crisis. This can be partly attributed to the falling of commodity price, but more to the weak demands from the major economies. The depressed figures of the world trade indicates that the external demand is still tightly restrained, which is adverse to the world economy. Compared with the slow trade recovery, the global direct investment is rocketing, with an over 10% increase in 2015 on year-on-year basis. This implies that the global investors are getting back confidence. The developed economies give a more stable performance and thus attract more investment. Proportionally, the emerging economies hold a smaller percentage of foreign direct investment.

Fifth, the China-America "dual-core" structure is further set up in the world economy. Though arguments are kept going on over whether the economy should be measured by the exchange rate or by the purchasing power parity, it is an irreversible trend that China and America are the largest unrivaled economies and the gap with the rest economies is being widening. Though China's economy is slowing down, its total amount and its relatively fast increase of 6.9% help it remain the biggest engine for the world economy. Besides, with a stable and moderate development, America has become the second largest engine for the world economy. In the new normal, the world economy will not come across big challenges as long as China and America continue to develop.

#### Seeking New Impetus for Growth

The post-depression world economy benefits from two aspects. On one hand, economies such as America, Europe and Japan carry out the quantitative easing monetary policy. The influx of cheap capital enlivens the sluggish international financial system, contributing to the moderate recovery of the world economy. On the other hand, the emerging economies, represented by China, are developing fast and inject vitality to the world economy. However, these two factors now demonstrate instability. America is expected to raise the interest rate. Despite the quantitative easing policy pursued by Europe and Japan, austerity will be the trend for global capital. China's economic growth has been geared from the fast to the medium fast, with correspondingly less contribution to the world economy. In this new normal, the world economy has to seek new strong impetus. Where does the impetus come from?

First, the major economies continue to reinforce the domestic structure reform with the aim to enlarge output. The financial crisis strikes the alarm that the major economies should further the reform and all the countries are on the way. Some countries have yielded positive results, some are still working on it while some suffer regression. The reform is directly reflected by the nation's economy. Countries like Britain and India are turning well since the powerful reform by the new government. However, countries like Brazil, Russia and the Middle East, who heavily rely on resource export, have got into troubles since the commodity price plummeted. The economy does not boom up in Obama's second termlack of reform impetus, limited with market elasticity and partially dysfunctional. China's new government is committed to reform and carry out a number of significant methods. However, reform lies in cracking the nut and the achievements take time to be illustrated. So the reform benefits will be reaped later on. Generally, the major economies have all come to a new phase of reform and the impetus will be continued through deep reform and structure updating.

Second, economic globalization shall be furthered. The pre-crisis global prosperity benefits a lot from the economic globalization. By offering

more chances, globalization conduces to the global market. The postcrisis world trade has yet to come up with the pre-crisis one. Thus, globalization with the core index of international trade has been hindered, which is showcased by the underachievement of the Doha round of trade talks. Economies expect to propel the trade liberalization and international trade through regional trade agreement. The TPP Agreement was basically achieved in October, 2015, which can be deemed as the most significant progress in this course. If the super free-trade agreements could all be carried out and connected, it is also an ideal alternative to globalization. Of course, risk exists. It is reminded to avoid the exclusive regional freetrade agreement controlled by certain great powers under the name of rules and regulation and with the aim of segmenting the world trade connections. All the economies should get the global view and promote the economic globalization to a new hight.

Third, it is better to tackle the geopolitical crisis and hedge against the geopolitical risk. The world economy entails a peaceful and stable international environment. At present, there is no breeding ground for global conflict. So the key step lies in keeping away geopolitical risk. Ukrainian crisis is worsening and the Middle East is still trapped in warfare. These geopolitical crises should never be underestimated. If these two risks lose their control, it will impair the stable European economy and the world energy resource, and even the global financial system. In addition, refugee turbulence will be triggered off by other countries' domestic and regional political conflicts, which will in its turn waste more economic and political cost.

Fourth, the impetus comes from international economic coordination and cooperation. Compared with the situation at the beginning and the end of the financial crisis, the major economies now take less initiative of cooperation and the influence of the macro-economic policies begin to wane down in terms of cooperation. For all kinds of reasons, G20's influence is dented over adjusting international powers and propelling multilateral cooperation and global consensus. The external economic policies of the major economies are made according to their own situations. The short-term economic and financial fluctuations in 2015 are partly due to the big adjustment and modification of the economic policies. And among them, the Fed's decision on whether and when to raise the interest rate tops all the influence of the policy adjustment. To tackle the Fed's interest rate raising, other economies and international markets should take precautions by initiative or by force. And the disturbance stirred up in the international financial market does harm to some countries. The fact that the world economy is recovering slowly reminds all economies to take into consideration the extensive influence

of the policies and make clear the directions of their policies. Besides, the fact tells the economies to improve macro-economic cooperation, boost economic confidence and enthusiasm. All these measures are targeted at a better growth of the world economy.

Translator/ Huang Ruixin

### World Politics: The Geopolitical Wrestle between the Old Order and the New Forces

Xin Qiang, Deputy Director of the Center for American Studies, Fudan University

In 2015, the geopolitical wrestle between great powers keeps heating up dramatically, which becomes even more violent between countries on behalf of the existing hegemonies and the re-revival or the rising of "new forces". With the continuously fermenting crisis in Ukraine and the rapidly increasing turmoil in the Middle East as well as the warming tensions of the South China Sea, the three global great powers China, the U.S. and Russia are tending to reoccupy the central position on the international political stage by the traditional geopolitical game with its abnormally eye-catching state.

#### *Russia launched the "second battlefield" of land power competition in Syria with the US*

The outbreak of Syria's civil strife in March 2011 has caused more than a quarter of a million people to death and made more than 400 million refugees flee away the country and nearly 10 million people became displaced. Facing with the long years of constant chaos of Syria, Russia which remained calm and silent all the time finally chose to intervene, that is, to take armed intervention in Syria so as to help its most steadfast ally in the Middle East-- President Bashar al-Assad to stabilize the domestic situation against the opposition and the armed extremist, while at the same time to ensure Russia the only estuary and strategic foothold in the Mediterranean.

In September 2015, Russian President Vladimir Putin suddenly announced that at Syrian President Bashar al-Assad's request, the Russian army was going to launch air strikes towards the Islamic state (hereafter referred to as IS) forces inside of Syria. On Sep. 30th, the Russian air force began to carry out the military action against extremist organizations inside Syria. On Oct. 7th, Russia again implemented the four warships which were halted in the Caspian Sea before to launch 26 newly cruise missiles towards the IS 11 targets. During the past over a month, The Russian Aerospace Defiance Forces or VKO has made aerial bombardment to thousands of IS targets. At the same time, the ground force and air force of both Syria and Russia began to do cooperative combat and launched a massive counter offensive, giving a heavy blow to the IS forces.

When the US and Europe stay at the shock moment, Russia has already completed continuous movements to the Middle East issue, making a

A long with the increasingly heated Ukraine crisis, the chaos in the Middle East and the tension over the South China Sea Issue, the fierce competitions between China, the US and Russia comes gradually to the stage. set of beautiful combinative strikes. Not long after the air raid, Russia united with Iraq, Iran and Syria setting the counterterrorism intelligence information center in Baghdad, jointly coping with threats including the expansion of the extremist organizations such as IS, thus establishing a regional antiterrorism alliance led by Russia. On Oct. 20th, Syria President Bashar al-Assad who had never travelled abroad since the outbreak of Syria civil war was suddenly been invited to visit Moscow and had a meeting with Putin, which thus broke the blockade of Western diplomacy to Bashar al-Assad. During the meeting, Putin showed that Russia would continuously made its best efforts to support Bashar al-Assad both from the military action and political aspects to fight against the terrorist forces inside Syria. On Nov. 23rd, Putin made again his visit to Iran again after 8 years, he also announced to relieve the ban on the enriched uranium that Russia provided to Iran and began to deliver the latest "S-300PMU2" air-defense missile. Russia made its mighty "return" in the chess game of the geopolitical strategically competition in Middle East, making the geopolitical situation in Syria and even the Middle East changed overnight and opening the "second battlefield" of Russia and the US land power competition.

From all the time, the US defines the regime of Syrian President Bashar al-Assad as "dictatorship" and clearly requires Bashar to step down. At the same time, the US has been offering to the Syrian opposition enormous economic and military aids. The US helped to train the armed opposition personnel, determined to overthrow the regime of Bashar al-Assad and even spare the cost of pampering and conniving the expansion of the IS extremist organization. Therefore, the US was extremely dissatisfied with Russian's a series of supports for Bashar al-Assad and thus made wantonly criticize to Russia, accusing it was taking the opportunity to attack against Bashar's so-called "moderate" opposition faction in the name of "antiterrorism". At the same time, the US was forced to make some adjustments on the existing policy in order to deal with Russia' continuous movements in Syria. On Oct. 30th, 2015, the US announced an additional \$100 million in aid to the Syrian opposition coalition. On October 31, 2015, Obama authorized and dispatched "less than 50 people" the Special Forces to northern Syria, aiming at coordinating and training local opposition Armed Forces to combat IS. This was the first time that the US sent troops into the ground war field in Svria.

What's more important is that even though the US was strongly dissatisfied with Russia's military action, it had no choice but accept a Fait Accompli reluctantly. On Oc. 20th, the Ministry of national defense of both the US and Russia signed a flight safety memorandum of understanding, including the flight safety distance when the two planes meeting in Syrian airspace, radio frequency and operation rules. The memorandum became effective immediately after signs, applying to the fighters and unmanned aerial vehicle (UAV) of the US, Russia and all the members from the international alliance combating IS. The purpose is to reduce the risk of air combat in-between the US and Russia military aircrafts. After the memorandum came into effect, the armed forces of both Russia and the US started all-weather contacts and decided the mechanisms of cooperation including how to provide each other mutual assistances in crisis situations. On Mar. 11, 2015, the US and Russia held a joint military drill with one fighter respectively, simulating the corresponding actions that the crew and ground troops should take when the two sides get dangerously close to each in order to avoid the occurrence of false events.

On the occasion when Russia and the US fought at close quarter in the Middle East based on their own geopolitical interests, the two precipitate terrorist attacks happened -- A Russian airliner crashed in Egypt's Sinai Peninsula and Paris terrorist attack on Nov. 13rd -- made the relations between Russia and the US appeared to be overturned. Facing with the increasingly serious challenges of terrorism, the American President Obama on Nov. 18th firstly called Russia "constructive partnership" in the negotiation on the Syrian issue and claimed that the US would be devoted to search for approaches of easing tensions which would be accepted by the both sides. While Russia appeals to cooperate with France and other western countries to sign agreements in order to establish an "antiterrorist alliance" against the threat of extremism. As the preliminary strategic coordination between the US and Russia started, the door to the solution of Syria crisis was finally opened.

#### All parties continue to rival over the Ukraine issue

On the occasion that Russia implemented air strikes on Syria winning the attention of the world, the strategic competition around the Ukraine issue between the US and Europe and Russia has not been weakened.

Although with the "Normandy Quartet talks" held the leaders of the four countries of Russia, Ukraine, France, Germany in February 2015, in Minsk, Belarus, all the parties concerned with the Ukraine crisis agreed the ceasefire from Feb.15th, the Ukrainian crisis has been eased. However, the situation in eastern Ukrainian is far from being calm down, conflicts between folk armed militias and government forces would still occur from time to time, the peaceful prospects of Ukraine remains bleak and unpredictable.

Firstly, the relationship between Russia and Ukraine is still tight. For instance, Ukraine has repeatedly accused Russia of continuously supporting to the folk armed militias in eastern Ukraine and announced sanctions against Russia on its more than 20 airline operators with prohibitions of not allowing these enterprises' flight into and over Ukrainian airspace. Then Russia adopted similar "ban of flying" to a number of Ukraine airlines. On Oct. 25th, 2015, Russia and Ukraine officially interrupted the direct flights between both countries.

Secondly, the US and Europe continues their sanctions to Russia. Since Crimea was incorporated into Russia, Moscow's relations with Washington and Europe fell to the low point of the post Cold War Era. In order to punish Russia, decisions were made by the western countries headed by the US on the G20 summit held in Turkey in November 2015 that the economic sanctions to Russia would be extended for another six months until the July of next year, which means the relationship between the US and Europe and Russia would not be eased in the short term.

Thirdly, what's more important is that the mutual intimidation and deterrence between Russia and the US and NATO "muscle showing" will continue to be upgraded, the smell of gunpowder grows increasingly strong. The US has already begun to deploy heavy weapons in the Baltic region while NATO has continued to hold large-scale joint military drills and form a rapid response force. And Russia also tit for tat, by holding military drills and missile launching tests, it gave back a tough response to the strategic pressure applied by NATO. For example, in Aug. 2015, the US led and started the Europe's largest joint air training ever since the end of the cold war, about 11 NATO allies of nearly 5000 soldiers held exercises to deal with "Russia's increasingly aggressive action". NATO held large-scale military drills named "Trident contact" in countries such as Italy, Spain and Portugal as well as Atlantic and Mediterranean sea areas from Oct. 3rd to Nov. 6th. This military drill features itself with the largest scale military exercise that NATO held since the year of 2002 with more than 30 countries and over 3.6 million soldiers to participate in. The purpose is aimed to level up the "war preparing ability" under the background of Ukraine crisis. On Oct. 28th, NATO announced again that it would send 4000 soldiers to Poland, Estonia, Lithuania and other 7 NATO allies bordered Russia in order to respond to the "security threats from Russia". However, Russia is not a sign of weakness. It has continuously conducted several missile tests on October 30, including an intercontinental ballistic missile "Aspen" and two submarine transcontinental ballistic missiles. In addition to that, the "Tu-160" strategic bombers, the Caspian Sea Fleet ships and "Iskander" K missile have launched multiple different types of cruise missiles. Russia thus can be declaimed to have held a strong "comprehensive nuclear war capacity" through the exercise of the large-scale "nuclear showdown". On October 30, two Russian "Tu-142" anti-submarine aircraft flied at a low altitude close to the US "Ronald Reagan" the nuclear powered aircraft carrier less than a sea mile, resulting in the military aircrafts of the US scrambled to implement intercept. The often seen dangerous game of "cat and mouse" between the US and Russia during the cold war is frequently staged again. On Nov. 10, 2015, Russian media "accidently" exposed the "strategic nuclear torpedo" scheme, which from another perspective confirms that President Vladimir Putin determined to "recover strategic nuclear balance with American no matter at any cost". Subsequently, the US announced in public that it would begin to develop the intercontinental ballistic missile systems of highway mobile.

#### The sharp increasing intensity over sovereignty the South China Sea

In the Asia Pacific region, the competition over the South China Sea issue between China and the US stepped into to a new level, which also made the tensions situation of the South China Sea reached a new climax. Ever since 2015, due to China's land reclamation project carried out in the South China Sea, the US began to frequently accused China in public over the South China Sea issue and instigated a provocation. In July 15th, the new US Navy's Pacific Fleet Commander Swift boarded the "P-8A Poseidon" reconnaissance aircraft and participated in the seven hours reconnaissance mission in the South China Sea. On Oct. 27, the US Navy sent "Larsen" Aegis missile destroyer to protect the so-called "freedom of navigation" and entered to cruise around the Subi Reef and Mischief Reef of the South China Sea within 12 nautical miles, which then was monitored and tracked as well as warned by the two Chinese naval vessels. With the start of American warships 'cruise in the Islands of the South China Sea, the US began to come to the stage from behind the scenes and had direct confrontation with China, which also unveiled the competition prelude of the Sino-US in the South China Sea.

The Chinese government has declared its strong dissatisfaction and firm opposition towards a series of serious behaviors of America to China's sovereignty and security interests, which also endangered the safety of Chinese personnel on the reef and facilities and damaged peace and stability in the region. On Oct. 29th, the Chinese Navy Admiral Wu Shengli, alerted in the video call to the Chief of Naval Operations Richardson that if the US continued to proceed "dangerous provocations" in the disputed waters of the South China Sea, the two sides were likely to "be seen in a severe and urgent situation which would even be out of hand". But the US apparently was unwilling to change its policies. On Nov. 2ed, the Pentagon asserted that the US would send warships into the Islands of the South China Sea within 12 nautical miles carrying out cruise twice each quarter, which means that the provocative behavior of the US would be normalized and systematized. On Nov. 5th, the United States Defense Secretary Ashton Carter boarded on the US Navy "Theodore Roosevelt", the nuclear-power aircraft carrier which then cruised in the South China Sea, he blamed again China for "trying to undermine the regional stability and balance of power". On July 11st, Carter delivered a speech at a defense forum in the Reagan Library of California, he clearly regarded China and Russian as "the potential threat" to the world, claiming that "this is the challenge that the whole era is confronted with, just as the time of Reagan's era". When facing with the threat of Russia and the rise of China, we must innovate the way of protecting the United States." And we should also ensure that the US will continue to transfer its strategic center to the Asia Pacific region, send the "most advanced and most sophisticated" Navy and its weapons and equipment as well as invest in the field of space, networks, missile defense and electronic warfare areas so as to cope with China's related actions. The US again sent two B-52 strategic bombers to the South China Sea for patrol mission and later flew close to in the airspace around the construction reef Island of the South China Sea in the middle of the night On Nov. 8th to the next morning. The above mentioned provocative actions of the America has already constituted the most serious challenge China met that the US launched to China's sovereignty in the South China Sea and impaired deeply the already fragile strategic mutual trust between China and the US and also provoked a new round of tension of the regional security situation.

In the upcoming year, the tense competition based upon the traditional geopolitical interests will continue to dominate the logic of the great powers. Given that the Ukraine issue concerns the core interests of Russia for which Russia would unlikely to make a compromise on its strategic interests, the confrontation between Russia and the US and Europe and the "quasi cold war" tends to be continued. And Syria is like the bridge tower of Russian who intervened in the Middle East and kept its traditional influence, for which reason Russia would not easily make concessions. Similarly, the dispute over the Islands and reefs of the South China Sea not only concerns China's territorial integrity and sovereignty, but also the staging base for China to step out the offshore and serge forwards the ocean. However, America, for the sake of keeping the sea hegemony in Asia Pacific would certainly try a variety of military, political and diplomatic means, taking the protection of the "freedom of navigation" and "regional stability" as excuses to constrain and handicap China. Besides, the sea power competition between China and the US in the South China Sea will exist for a long time, even the possibility of

sharpening and upgrading will not be ruled out. However, it is not a wise decision for America whose comprehensive national strength remains in decline to implement competitions with China and Russia at the same time with more difficulties and obstacles.

Translator/ Liu Ling

## The United Nations and Global Governance:

#### Approaches to Forge Ahead on the 70th Anniversary of the United Nations

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This year marks the 70th anniversary of the founding of the UN which has held many commemorative activities and summits, especially when the 2030 Agenda for Sustainable Development was passed in the summit of sustainable development. At the same time, new progresses are made in both global and regional governance, such as the founding of the New Development Bank BRICS and Asian Infrastructure Investment Bank, the Belt and Road initiatives, and the agreement of TPP, which have jointly speeded up the transformation of global and regional governance.

From September 26 to 28, president Xi Jinping paid his first visit to UN Headquarters and presided over the round-table conference of south-south cooperation and the Women World Summit, putting forward China's voice of peace and development and announcing that China will support the measures and actions of UN. On October 12, the Political Bureau of the Central Committee of the CPC organized study in the framework and system of global governance, when Xi Jinping emphasized that the system of global governance should be more fair and reasonable to create favorable conditions for China's development and global peace.

#### The global governance is going through significant transformation.

The transformation of global governance refers to fundamental change of the framework and system of global governance, including global economic governance and security governance.

But the global financial crisis in 2008 stimulated the change of the global governance framework and system and its rebuilding process, which marks the transformation in a real sense. The transformed global governance follows the new trends and features: Firstly, the main part of governance shifted from unitary system to multiple one, including states and non-states, government, society, market, inter-governmental organizations, multinational corporations and global civil societies; Secondly, the west-dominated governance manner has changed to a co-governance one in a global sense, particularly in a situation where emerging developing countries have become a driving force for the transformation; Thirdly, the content of governance has shifted from security to economy. On the one hand, global security governance lags behind and does not cater to the needs, and it cannot deal with such global security threats as marine conflicts, terrorism and cyber-attacks, along

The UN has been playing an important role in international development and global governance, and it is now going through significant transformation after functioning as an international organization for 70 years. There are plenty of advantages and resources that could be used to improve the global governance, which requires the cooperation and collaboration between the UN and regional organizations. And China is now become more influential in the world stage and it diplomacy in the UN is now marching toward a new normal.

with the situation where no effective ways can be found to solve regional hot issues; on the other, global economic governance sees a promising future; fourthly, the core of the governance has shifted to international and regional governance from the globe, with the Asia-Pacific region becoming the key point such as APEC, CICA, SCO, EAS, "One Belt and One Road", AIIB and TPP; fifthly, the key of governance lies in the financial field. Whether traditional IMF and World Bank, or the emerging Development Bank of BRICS, the band account of SCO, AIIB or Silk Road Fund, they are all highlights of global economic governance.

In recent years, global governance has achieved great progress. It includes: First, the transformation of UN -- the sustainable development summit of UN passed the 2030 Agenda of Sustainable Development, setting up 17 goals to provide approaches for global development and international development cooperation. The summit on peacekeeping built standby peacekeeping mechanism through the reform of peacekeeping actions. The earlier transformation consisted of the proposal of "the responsibility of protecting", setting up Human Rights Council, Peace Commission and UN Women; Second, the reform of IMF and World Bank -- reaching an agreement of reform in 2010, despite the fact that this was not achieved but the share reform of IMF and voting right reform of World Bank has been irreversible; third, the development of G20 mechanism -- it has shifted from a mechanism to deal with financial crisis to the one to deal with economy; fourth, the rising of BRICS -- the establishment of New Development Bank and contingency agreement fund means the first financial organization after the World War II with no developed members was built, injecting fresh blood to international financial system and serving as a model for global governance; fifth, a breakthrough of TPP and TTIP -- pushed forward and dominated by the US, and in fact, it is an action of economic governance dominated by the western countries.

In the transformation of global governance, China serves as an important driving force. Since the 2014 Beijing APEC summit when Asia-Pacific free trade zone and connectivity blueprint were passed, the "One Belt and One Road" strategy, AIIB and New Development Bank BRICS have been successively launched by China, exerting profound effects on regional cooperation and governance and bringing about great significance to global economic governance.

#### Advantages and resources of the United Nations

During the transforming process of global governance, UN seemed not to take actions to change the situations although it had been drumming for the reform. As a center of international order and global governance for the past 70years, today's UN is facing marginalization. Thus, UN should continue with the past and open up the future, giving full play to its special advantages and resources and reshaping the organization's core position.

On the one hand, the UN should demonstrate its universality, authority and global advantages. Firstly, it should uphold and publicize its universal concept and values, including sovereignty and human rights, democracy and equality, freedom and development, justice and fairness, inclusiveness and harmony, and so on. Secondly, it should strengthen its authoritativeness and effectiveness. UN should urge its members to better follow the International Law, treaties and the resolutions. Thirdly, it should push forward global agendas and proposals, focusing the common interests in climate change, terrorism, public health and marine, cyberspace, outer space, and polar region issues, and erecting rules for common governance.

On the other hand, the UN should strive to strengthen its interaction with regional organizations and emerging multilateral mechanisms in order to achieve a state of cooperation and shared governance in the globe and among various regions. For example, they could send representatives, let each other know their own condition and exchange information from time to time.

There are both competition and cooperation between the UN and the Group of 20 in the global economic governance. These two organizations reflect two different kinds of orientations and characteristics in the global economic governance: the UN exposes the pursuits of commonness and equality while the Group of 20 put emphasis on efficiency and efficacy. Strengthening the cooperation and collaboration between the UN and the Group of 20 will help reinforce the balance of the global economic governing system, achieve sustainable growth in the development of the world economy, reflect reasonable concerns of middle and small countries and thus help achieve the cooperation and shared governance in the development of the world economy.

The UN and the BRICS could share the idea, experience and agenda of development. The BRICS could utilize the mechanism and platform of the UN, strengthening its cooperation and collaboration with the UN on international issues and enhance its status and influence in global governance. Furthermore, the UN could vigorously promote sustainable development and South-South development and cooperation in the new period through the demonstration effect of the effective cooperation of the BRICKS. The UN could take its own advantage of being international, representative and authoritative, give play to its function of arranging and coordinating ,and mobilize and integrate all the development resources from both the emerging multilateral mechanisms and transforming forces such as the BRICKS and the development system, various specialized agencies, fund and schemes of the UN, thus promoting international development and cooperation ,enhancing the legality and effectiveness of the global development and governance framework.

The UN could cooperate with the emerging multilateral mechanisms of Asia and strive with them to build a new order the safety and development of Asia. The concept of One Belt and One Road could be taken as an example. This is a trans-regional initiative for development and cooperation which not covers Asian countries along the line as the main part but also include countries form other continents as participators. It could build a new order for the development of Asia and facilitate its efforts through the mechanisms and platforms of the UN. For example, the target abutting with the development agenda of 2030 is promoted under the frame and mechanism of South-South cooperation.

The Conference on Interaction and Confidence-Building Measures in Asia could also be taken as an example. As a regional security forum with the largest coverage area, the most members and the widest representative influence, the CICA vigorously initiate the Asian Security Outlook of commonness, comprehensiveness, cooperation and Sustainability, establish a few framework for regional security and pursue the road of joint construction, sharing and win-win, which promises to develop into the basis of the new security order of Asia. Asian countries could make contributions on concepts and actions for the global security governance dominated by the UN, and the UN, at the meantime, could provide a platform and approach for the construction of the Asian security order. Under the UN framework, strengthening the cooperation of Asian countries (especially eastern and southern Asian countries) in peace operation will be an effective way to enhance mutual trust and build the regional order.

#### China's Diplomacy in the UN March toward a New Normal

With President Xi Jinping's attendance in the series of activities celebrating the 70th anniversary of the UN as a flag, China has been transforming the previous participatory diplomacy to a guiding-oriented mode. This kind of transformation is mainly manifested in the following aspects:

1. The agenda was established for the first time. The South-South Cooperation round-table conference and the Global Summit of Women are held under the proposal of China, cosponsored by China and the UN, and hosted by President Xi Jinping and Secretary General Ban Ki-Moon, showing China's breakthrough in the setting-up of the agenda. In President Xi's speech on the series of summits of the UN, he proposed the concept and design, provided topic and schemes for discussion and established the system and rules, marking an important elevation of China's multilateral diplomacy.

2. Standby Peace-keeping forces have been established. China's diplomacy in the UN is the core of China's multilateral diplomacy, and peacekeeping is the highlight of China's diplomacy in the UN. Participating in the peace-keeping activities is beneficial to the building of Chinese military force and will help improve China's acting capacity in overseas areas and shape its image as a great power.

3. A center and an institute have been set up. The Knowledge Center for International Development and the Institute for South-South Cooperation and Development embody China's new ideas and measures in the issue of foreign aid and the mode of international cooperation, and foresee the breakthrough that China will make in the process of fighting for international discourse right.

4. China has raised its discourse right and influence over the globe through foundations and donations. Setting up China-the United Nations Peace and Development Fund and the assistance fund for South-South cooperation and donating to the World Health Organization and UN Women will greatly enhance China's discourse right and influence in these fields.

5. More importance has been attached to International rule of law. In the year of 2014-2015, President Xi Jinping, Prime Minster Li Keqiang, and Minister of Foreign Affairs Wang Yi respectively offered their propositions of promoting the legalization of international relations, safeguarding the authority and effectiveness of international law and propelling the process of achieving international rule of law. Ruling of law is the mainstream value of the international community and accord with the concept of law-based governance of our country in some way. If we say that there are still relatively evident differences between China and the Western world on the issue of democracy, freedom and human rights, then ruling of law is a common topic on which China could have a dialogue with the western countries.

However, China still needs to make innovations and breakthrough in a series of important issues to achieve the transformation of diplomacy in the United Nations. For example, China's identity and location as a developing country need reemphasize. China is the secondly largest

economy in the world. The membership fee and apportioned money it pays to the United states rank second among all countries, and China send the most peacekeepers among the five permanent member of the united nations security council. President Xi Jinping declared a set of measures and actions to be taken to support the United States and the developing countries on the General Assembly and announced that China will always vote for developing countries. But there are over 130 developing countries in the world and each defends their own benefits and values. China has been growing into a special member among this group and shows attitudes which are different from common or even most developing countries on some issues. Moreover, there is an issue related to the membership fee and apportioned money used for peacekeeping. China "objects to be treated differently when compared with other developing countries and refuses to accept any method of calculation going beyond China's payment capacity." But what is even more important is that we should utilize the condition to fight for more legal rights and learn to earn the money back through the platform of the United States. And the third issue is the reform of the United States. China's position paper delivered on the 70th anniversary of the United States didn't cover the reform of this organization, and President Xi Jinping seldom mention this issue in his speech on the General Assembly, either. Actually, we should comply with the current circumstances and trends, playing a guiding role in the reform instead of avoiding it and making the United States more democratic, powerful and effective through carrying out reform. The president of the 68th UN General Assembly—John Ash (Antigua and Barbuda) was accused of corruption and members of the Chinese People's Political Consultative Conference was involved in this case. We should prevent and avoid the corruption problem in the process of carrying out the plan of multilateral aid and indeed become a responsible great power in the international community.

Translator/Zhuang Fei

## South China Sea Disputes Are Heading Towards Dangerous "Uncharted Waters"

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2015, the South China Sea dispute was at a time of change and turbulence. The disputes of the South China Sea related claimant countries over the scramble for marine resources, island sovereignty, maritime demarcation and channel security are further aggravated; the intervention of "Great Maritime Powers" in the South China Sea Situation is intensified gradually; under the background to build a "Maritime Power", the Chinese government increased the South China Sea rights protection. With the South China Sea Confrontation upgraded and the conflict risk increased, the related countries are heading towards dangerous "Uncharted Waters". To exit the "Uncharted Waters", all the parties should exercise restraint and seek a compromise point.

#### The Deadlock Resolved By the International Arbitration

On the issue of whether to resolve the South China Sea Dispute through International Arbitration, some South China Sea claimant countries support while China oppose, which set both parties in a stalemate. Philippines is the judicialization "vanguard" of the South China Sea Dispute. On January 2013, Philippines submitted "Philippines v. china arbitration case" to The Permanent Court of Arbitration at The Hague. Philippines believed it had submitted a written document of "notice and rights claim about West Philippine Sea" to China and stated the disputes, requests and the reasons. Obviously, Philippines filed the arbitration well prepared.

China will always stand its ground of "not accept and not participate in the arbitration filed by Philippines". On Dec. 7th 2014, China published its "position paper of Chinese Government on the jurisdiction issue in the South China Sea Arbitration case filed by the Republic of Philippines". In the "position paper", China clarified that the arbitration court had no jurisdiction in arbitration cases, which opposed Philippines' claim in law and urged it to return to the effective way of direct negotiation.

Oct.29th 2015, Philippines unilaterally called for the established "South China Sea Arbitral Tribunal"(The Hague) to give a ruling on the jurisdiction and admissible issues. The tribunal made a ruling that Philippine could have jurisdiction in 7 out of 15 requests it had raised. From the result, in the battle between China and Philippines, China seemed to lose the first game. Although China clarified that the Arbitral The author reviewed the development of the South China Sea Disputes, analyzed the hidden reasons and provided five suggestions. Tribunal had no jurisdiction, the result had showed the court thought it had part of the jurisdiction.

# The Game of "Intervention" and "Anti-intervention" between great powers is intensified

Since 2015, the US has been increasing its intervention in the South China Sea disputes by "freedom of navigation" and "aviation liberty". May 8th, the United States Department of Defense released the China Military and Security Development Report (2015) and pointed out that in the South China Sea area, China was pushing forward large-scale land reclamation that could be used for "base of operations". It also said the land reclamation area was enlarged to about 8 square km, which was contrary to the "regional wish to realize peace and stability". May 13th, the Assistant Secretary of the US State Department for Asian and Pacific Affairs Russell warned China on a US senate hearing that its effort to build island in South China Sea would be in vain. Russell said that, "No matter how much sand you have piled up on the islands and reefs of the South China Sea, you are unable to achieve sovereignty." May 20th, the US Department of Defense allowed a CNN journalist board its Boeing P-8 Poseidon for interview and flied over the waters around the Fiery Cross Reef of the Nansha Islands. Sept. 24th and 25th, the US President Obama required China to immediately terminate the instruction of islands in South China Sea during a talk with Chinese President Xi Jingping.

The latest conflict happened on Oct. 27th 2015. The US sent USS Lassen to sail within 12 sea miles around South China Sea Islands and Reefs (Subi Reef and Mischief Reef). By this, the US showed it refused to recognize China's sovereignty over the Nansha Islands Waters. China strongly objected the action of USS Lassen that time, condemned that its actions was illegal and urged it to stop further "dangerous and aggressive" move. It is challenging for China this time to respond to the US and also vital for the US to avoid further aggressive actions under the tough attitude of China. For the US government, it is sailing toward dangerous "Uncharted Waters".

The possibility of conflict between the US and China around South China Sea Disputes is increasing, and the two countries' confrontational behavior is sailing towards dangerous "Uncharted Waters" in South China Sea. From China's perspective, it respects every country's Freedom of Navigation and Aviation Liberty under the International Law. America's provocative behavior would pose a threat to China's sovereignty and safety. America neglects the island building behavior of Malaysia, Philippines, Vietnam and other countries while selectively interfere with China's behavior. From its perspective, the US believed it was just sailing freely on the high seas (rather than China's territorial waters). The calls for tougher actions are increasing in both countries, they have to manage to ease the tension.

Apart from the US, other South China Sea "Extraterritorial Powers" such as India and Japan also intervene in the South China Sea Disputes. Oct. 14th 2015, India's Foreign Minister Swaraj and Philippine Foreign Minster Albert del Rosario called South China Sea by "West Philippine Sea" and "South China Sea" at the same time in a joint announcement after the Third India and Philippines Bilateral Joint Commission, which indirectly stated India's diplomatic support for Philippine in the dispute. Japanese Prime Minister Shinzo Abe repeatedly supported America's sail around South China Sea islands and reefs. Japan's ministry of defense planed to dock the warships of Japan Maritime Self Defense Force in Vietnam's Cam Ranh Bay which faces the South China Sea in 2016 for the first time with the intention to contain China in the South China Sea.

#### New Considerations on the South China Sea Strategies

South China Sea is the key part in the China "Maritime Great Power" strategic layout, the sea that must be passed for China to find footholds in Pacific area, explore the India Ocean and push forward the "21st century Maritime Silk Road" plan. Under the background that China is establishing a "Maritime Great Power" and the South China Sea Dispute is highlighted, the Chinese Government must give it a second thought.

Consideration One: to seize control in the law nature of U-shaped line of the South China Sea. The major basis is the "historic rights". The hard situation for the Chinese Government is that the state of the "historic rights" is very vague and the detailed rights are not mentioned. The bigger challenge is that the Chinese law doesn't give the U-shaped line a clear legal identity and legal position. The writer thinks that, of the four legal explanation, the South China Sea U-shaped line "state line saying", "belonging line saying", "historical water line saying" and "historic rights saying", the supporting facts and legal reason of "belonging line saying" is the most sufficient. "Belonging line saying" proposes that under the premise that the sovereignty of South China Sea belongs to China, China designates its territorial sea, EEZ and continental shelf in accordance with the "United Nations Convention on the law of the sea". It not only suits the appearance, development and historical process of the U-shaped line, but also benefits China's right and interests in South China Sea area. The writer advises that if the EEZ doesn't reach the U-shaped line, U-shaped line's "historic right" can assist. Within the "historic right" line, China enjoys marine fisheries resources, seabed oil and gas resources, the development and utilization of mineral resources priority. The writer

also thinks, it can make other claimant countries more rational about China's claim by adding "historic right" explanation to the legal nature of "belonging line". It also can help China take the lead in international law explanation of the U-shaped line.

Consideration Two: to promote the establishment of South China Sea Claimant Country Mechanism. Rather than putting the disputes in the "International Judicial System" (The Hague's Permanent Court of Arbitration), it is better left within its territorial waters. The mechanism promoted by China includes five claimant countries, that is China, Vietnam, Philippines, Malaysia and Brunei. In this mechanism, there are four vital problems. Firstly, the "bilateral and multilateral negotiation" is practical. The island sovereignty disputes should be solved under the "Five Countries and two sides"(including China, Vietnam, Philippines, Malaysia and Brunei) framework; after Indonesia was included, the delimitation of sea area should be decided under the "Six Countries and Two sides" (including China, Vietnam, Philippines, Malaysia, Brunei and Indonesia) framework. Secondly, the claimant in maritime resources should be declared more clearly. Under the South China Sea Claimant Countries Mechanism, China should turn the "historic right" into practical use of maritime resources. China should show other four claimant countries what its right is. Thirdly, the navigation liberty issue and the freedom of the sailing of military ships on and under water should be negotiated as soon as possible. The military use of South China Sea lacks recognized rules, which is the reason why conflict exists between China and America. This issue is also a matter of principle between coastal countries (whether they are claimant countries or not) and user states. Now each claimant countries' claimed exclusive economic zones overlapped with each other, it is necessary for all parties to achieve common rules for military use and military navigation. It is possible to set short-term, mid-term and longterm goals. The short-term one is to control the crisis; the mid-term one is to build mutual trust; the long-term one is to solve the dispute.

Consideration Three: to examine the differences in the positions of the claimant countries and take action accordingly. The other four claimant countries apart from China can be divided into two groups: Philippines and Vietnam are in a group, their attitude toward China is tough; Malaysia and Brunei are in a group. China should adopt a firm bottom line policy to Philippines. China and Vietnam should properly resolve the South China Sea Disputes from the overall strategic level to maintain a friendly bilateral relationship. China and Vietnam should borrow experience from the successful resolution and cooperation of land boundary demarcation and Beibu Gulf demarcation. South China Sea Disputes is the final historical issue between China and Vietnam, if this issue can be resolved

properly, the two countries' relationship could develop to a better stage. Malaysia and Brunei keep a low profile, they choose to make "muffled fortune" by keeping the gas and oil exploration and fishing going. China's resolution is extra oil and real benefits. When China is making open protest, it should avoid putting those two countries in an "opposite" position. Since Indonesia is the biggest country in the ASEAN and it doesn't make a claim of sovereignty in South China Sea, in the dispute, it is rather detached and neutral. So China should maintain Indonesia through careful diplomacy to make sure Indonesia could keep neutral.

Consideration Four: to strengthen the sovereignty in South China Sea Islands and Reefs by law. October 2014, the fourth Plenary Session of the Eighteenth Central Committee passed the Decision of the Central Committee of the Communist Party of China on a number of major issues concerning the overall promotion of the rule of law. It says that "to use legal means to safeguard China's sovereignty, security and development interests". South China Sea Islands and Reefs and the surrounding waters concern China's sovereignty, security and development interests, so China should take the lead to influence the law making. In addition to strengthen their presence in the South China Sea through the construction of facilities, military construction, administrative jurisdiction, resource exploitation and other aspects, China should be good at taking legal means and thoughts. In dealing with Philippines' unilateral request, China should take advantage of the legal means to fight back Philippines' provocation and discredit.

Consideration Five: cultivate the national's rational and legal territorial view of land and ocean. Marine territory and mainland territory is different in legal status. Mountains or plains, they are equal in law. Marine territory has features of "liquid validity" and "fuzzy attribution". In the legal status, the marine territory can be roughly divided into two types: one that the nation has exclusive sovereignty and the other that has limited sovereignty decided by the international law or international conventions. For a country, the ownership and jurisdiction of different parts of the ocean can be significantly different. In the 1998 June "The exclusive economic zone and continental shelf law of the people's Republic of China", "If China's marine territory overlaps with its neighbor's EEZ or continental shelf, the border should be made in accordance with the international law on the basis of fairness. It can be interpreted in this way: in the overlapped area, both parties should consider from the overall benefit of the state to seek a fair and reasonable solution. The maritime border negotiation is a process of "give and take". Chinese scholars should think rationally and spread real voice about the China border affair. Chinese nationals should understand the differences of different parts of oceans in law from a legal perspective. Chinese nationals should also have a reasonable and legal expectation for the future South China Sea negotiation. The Chinese government should consider before and in the negotiation how to gain support from Chinese nationals and public opinions while not hurt the national pride.

After all, we have to study the South China Sea strategy deeply from the joint view of international law, international mechanism, international relations and domestic sovereignty.

From the international law angle, China is advised to clarify the legal nature of South China Sea U-shaped line to convince the international society, so as to effectively influence the decision making of "the South China Sea Permanent Court of Arbitration" (the Hague). From the international mechanism level, China is advised to promote the establishment of claimant country mechanism actively, take the practical "bilateral and multilateral combined" negotiation strategy and turn the "historic rights" into practical maritime resource right. From the international relation angle, China is advised to walk out of the conventional broad outline pattern, consider deeply the position differences of the South China Sea claimant countries and take action accordingly. From the domestic sovereignty angle, China is advised to strengthen its presences by legal means and cultivate its national's reasonable and legal view of maritime territory.

Translator/ Ji Yingyun

## **Middle East: Order in Chaos**

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Five years since the upheaval in the Middle East, extreme unrest, great division, and major reorganization constitute the typical characteristic of the Middle East, distinctively exhibited by the domestic turmoil in the transformed Arab countries and the imbalanced frame of the Middle East. In 2015, the situation in the Middle East still presents this feature that is the turmoil and chaos as the norm, only more intense than before. However, among the chaos, signs of governance also appear in the Middle East in 2015. The sign of Iranian nuclear agreement is undoubtedly the biggest spotlight of the changing situation in the Middle East, for it not only removes the largest regional security threat of war, creates a Iranian nuclear pattern for the political settlement of the Middle Eastern hot issues, but also helps Iran integrate into the international community and balanced Middle East regional structure.

In 2015, among the chaos in the Middle East region, order and organization find its way in terms of the transition of Arab countries regional heated issues, the regional structure and other aspects in the Middle East. Currently, the transformed Arab countries have into two types: the ones move toward stability (such as Tunisia, Egypt) and the ones toward volatility (such as Yemen, Libya), showing the coexistence of stability and chaos. Extreme terrorist forces such as "the Islamic State" (IS) continued to wreak havoc together with refugee problem rumbling on. These problems have severely impacted on global security and global governance, but they also directly promote the international cooperation about anti-terrorism and refugee governance. Although the tensions of the old and the new heated issues continue in Syria, Iraq, Yemen, Palestine and Israel, the Syria and Yemen issues now are possible to return to the political track The geopolitical game and sectarian conflicts among the big countries in the Middle East continued to deepen, which exert a profound impact on the issues of Syria, Iraq, Yemen and the fight against IS, while more rational regional powers' diplomacy and more balanced game between great powers create opportunities for solving Middle East issues. .Presently, even though the trend from chaos to peace and order has not appeared yet in the Middle East, but the governance and organization among the chaos let the whole world see the hope to change the situation in the Middle East

In 2015, among the chaos in the Middle East region, order and organization find its way in the transition of Arab countries, regional heated issues, the regional structure and other aspects in the Middle East. Presently, trends from chaos to peace and order have not showed vet in the Middle East, but the governance and organization among the chaos let the whole world see the hope to change the situation in the Middle East.

#### Iranian Nuclear Negotiation Reached Agreement after 12 Years

In July 14, 2015, the Iranian Nuclear Negotiation which have lasted for 12 years, finally come to an agreement after several rounds of intermittent talks full of ups and down. Iran signed a comprehensive agreement on the Iranian nuclear program with six world powers. The core of the agreement is that Iran agreed to slash its nuclear research and development capabilities under the supervision of the international community (the number of centrifuges of Iran will be cut by two thirds, reduced from about 1.9 million units to 6104 units; Iran's heavy water plant at Arak will be redesigned and rebuilt to ensure they are used for peaceful purposes; and so on), in exchange for the lift on the comprehensive sanctions of the United Nations, the United States and the European Union against Iran.

The fundamental driving force behind the Iranian nuclear agreement is based on the foundation that Iran and the United States own mutual demands. In the background of strategic contraction of the United States from the Middle East, the United States has used all the means of except for the use of force. The negotiation became the means that the United States cannot circumvent and also a diplomatic legacy that Obama government strives to build. As for Iran, getting rid of international sanctions economic and recovering disastrous economy have been the relentless pursuit of the moderate conservative Rouhani since he took office in 2013. Thus, the adjustments of cognition and policy between US and Iraq directly contributed to rounds of the Iranian nuclear negotiations, until the Iranian nuclear full agreement is reached.

Iran and all the parts of the international society are the winners of the Iranian nuclear agreement, while obviously Iran is the biggest winner. Iran has guarded its national dignity, retained its right to the safe use of nuclear power, and had reached a comprehensive lifting of sanctions, at the same time, it is a great opportunity to help Iran out of isolation, integrate into the international community, and achieve the strategic objectives of becoming regional powers. United States also benefits from the agreement. The sign of Iranian nuclear agreement decreases the difficulty of the U.S strategic contraction from the Middle East. Iran's moderate participation in regional affairs also contributes to shape the U.S-led regional balance. Besides, the comprehensive settlement of the Iranian nuclear issue, the breaking-ice of US-Iran relations, and the maintaining of Nuclear Non-proliferation Treaty, will become an important part of Obama's foreign diplomatic heritage. Russia, Europe, China have not only played a special role in settling the Iranian nuclear issue, they can also share benefits of the Iranian market after the lifting of sanctions on the economy. For the international community, particularly the Middle

East, the Iranian nuclear agreement is an example of a political settlement of international hotspot issues, and creates a conducive environment to maintain international and regional security. The EU has put forward a political method of Iran's nuclear mode to solve Syrian problem, which is the best description of exemplary value of the Iranian nuclear agreement.

#### Opportunity among crisis in the volatile region

The biggest crisis in the Middle East in 2015 is undoubtedly complicated regional problem of the raging terrorism, religious extremism, the reconstruction of political landscape, the serious refugee problems deteriorated by the extension of the IS, Syrian Civil War, the unrest in Iraq. Subsequently, there is a complex geopolitical game arising from countries inside and outside the jurisdiction of the state. meanwhile, the fact that the deepening of the regional crisis continues to threaten the interests of all parties leads the United States, Russia, Europe and the regional countries actively or passively adjust relevant policies, and thus make it possible for relevant regional issues to see the light of amelioration.

As for the combat against IS terrorism, the US-led international coalition against IS terrorism is not so effective. IS continues to take over more and more countries in Syria and Iraq. After capturing Ramadi in Iraq and Palmyra city in Syria successively in the first half year, IS continues to tear the existing political map of the eastern Mediterranean region through territorial encroachment in Syria and Iraq. In addition, what is more challenging is the wild spread of their ideology and capacity of recruiting in the Islamic world (West Asia, North Africa, Central Asia, South Asia, Southeast Asia) and in the Western countries, which has become a serious challenge confronting global governance. With the persisting expansion of the IS and other extremist forces, the Syrian civil war which now stucks in the long-term stalemate also indicates a unfavorable situation for the Bashar regime. The Iraqi regime was once in precarious trouble too. The religious and ethnic conflicts among the Sunnis, Shiites and Kurds, are also exacerbating divisions in Iraq.

The refugee problem, caused by three major reasons: the IS expansion, problem in Syria and unrest in Iraq makes it the biggest refugee crisis since World War II. The problem of homeless refugee has become the special tie that connects Europe, North Africa and West Asia, leaving the promoters of "Arab Spring" Europe to suffer greatly and eat its own bitter fruit. The successive spreading of extremist ideologies and organizations in the European hinterland, and vicious terrorist attacks such as the "Charlie Hebdo" have caused deep anxiety in Europe On the Middle East countries, Turkey, Saudi Arabia and other countries who have involved

themselves in Syrian problem, have their own concerns. The multiple large-scale terrorist attacks in 2015 planed by IS, and domestic political crisis in the two countries (the power struggle after replacement of the Saudi royal family, the hajj stampede, the Turkish electoral crisis and the Kurdish issue), created great security and political risks to these two countries.

However as the Middle East crisis continues to hit the bottom, the world's big powers and regional powers are forced to adjust policies, thus the situation in the Middle East begins to show some positive signs worthy of recognition since the second half of 2015.

Firstly, the United States has slowed the pace of contraction from the Middle East, and puts the reshaping of the balance of the Middle East as the important strategic objective, which at some extent facilitates the rebuilding the Middle East order. The US has increased the force against IS in Iraq, slowed down the military withdrawal from Afghanistan, absorbed Iran to participate in Syria talks in Vienna, loosed stance on the issue of the fate of the Syrian regime of Bashar, restrained in the high-profile fight against IS of Russia. These are all the embodiment of US policy adjustment.

Secondly, Russia's increasing strategic investment in the Middle East is conducive to a balanced regional frame. The aim of Russia's air raid in Syria against IS forces, is to promote negotiations, which has been partially fulfilled. Since October 2015, all forces have rushed to Moscow for the consultations on the issue of the Middle East. The opening of the third meeting of Syria in Vienna and the participation of Iran for the first time, as well as the loosening of stand of the West and Saudi Arabia, Turkey on the Syrian regime of Bashar, are all closely related to Russia's strategic adjustment in the Middle East.

Besides, under the multiple pressures of the refugee problem and antiterrorism, the European policy toward the Middle East has become more pragmatic and rational. Besides increasing forces against domestic extremism, European powers and the European Union increase have also increased efforts to combat IS. On the issue of refugee, Europe strengthens their internal cooperation as well as their cooperation with Turkey and other Middle Eastern countries.

Finally, some regional countries like Saudi Arabia and Turkey which have actively intervened in the "Arab Spring", especially Syria issues, are now stuck in a quandary. Under internal and external challenges, they are forced to adjust their policies towards IS and Syria.

However, it must be noted that the above positive factors are still far

from suppressing and resolving the Middle East crisis. The reshaping the Middle East frame and order still has a long way to go.

#### Order and Chaos Coexist in Countries in Transition

"Order" in transition countries is exhibited by the fact that Tunisia and Egypt have found their way to relevant stability though in different ways, and have finished the political transition and reconstruction of the country initially.

Since the end of 2014, Tunisia has completed the presidential election and the reorganization of the government cabinet through democratic procedures. It is also the to only existing fruit of the "Arab Spring". In the political transition process of Tunisia, the national dialogues dominated by the National Federation of Trade Union have played an important role in the political reconciliation of the partities, which enabled them to win the 2015 Nobel Peace Prize. The greatest enlightenment of Tunisia's political transition lies in the dialogues, reconciliation and the spirit of compromise among different political forces, religious and secular forces. The Revival Movement Party accepted its failure and gave up its right peacefully, and the Islamic forces peacefully and lawfully integrated itself into the process of political development. These are all lessions for the Arab countries in transition. Egypt also completed its political transition initially in 2015, but through a very different way. The political transition in Egypt is accomplished by the deposition of the unfavorable Morsi ruling, the strong suppression of the Muslim Brotherhood through military forces, and the presidential and parliamentary elections. This is also seen as the process of rebuilding the authority by Western public opinion. More than a year since Cecile came into power, Egypt have gained a lot from its adjustment in the economic, security and diplomatic fields. Of course, Tunisia and Egypt still face challenge in economic, social and security areas, and their prospects are still not so optimistic.

The "chaos" in transition countries is also shown by the continued instability and anarchy in Yemen and Libya. The failed transition of Yemen became an important incentive for military intervention from Sadi Arabia, while Libya is sinking into a long-term secular and religious armed separatism.

In 2015, Yemen's political transition came into a serious crisis due to internal conflicts and interventions from Saudi Arabia and other countries. Since Saleh handed over power peacefully in 2011 and Hadi was elected president in 2012, the core task of political transformation in Yemen is to finish its political transition by the New Constitution completed by the 2013 National Dialogue meeting initiated in 2013. However, the economy and the security situation continue to deteriorate. Conflicts between the

central and the regional area, among different religious groups, among different tribes, the confluence of the remaining armed forces of Saleh and Shiite Jose, and the rampant activities of terrorist forces like Al-Qaeda, all make it impossible for national dialogue meeting to take place in Yemen. In early 2015, the northern armed forces of Jose attacked and occupied the presidential palace and other cities with the excuse of being discontent by the new draft of constitution.Finally, President Hadi Saudi exiled, and Saudi Arabia joint with otherArabian countries launched air strikes to Jose at the end of March. Yemen crisis continues to develop..

The root behind the ongoing turmoil in Libya is the military irresponsible intervention from Western countries, which offers space for the conflicts between the religion and the secular, tribal conflicts, the outbreak of regional conflicts, and the rampancy of extremist force. Particularly, the "General National Congress" from secular forces and the "National Assembly" dominated by religious and militia forces set up a government seperately, resulting in countries separated by two governments. Although the two sides have negotiated for several times, until now there is still no hope of reconciliation. The biggest lesson from the crises of Yemen and Libya is that the political transition dominated by external interventions will fail with a lot of problem.

To sum up, we can learn three important lessons from the order in the chaos in the Middle East: firstly, the only way to stability and order for the countries in transition is to choose their own developing road. External Forced way like military intervention, exporting democracy, revolution of color are helpless for them to create development and stability in the Middle East. Secondly, the Middle East countries should deal with well internal relations of reform, development, and stability, and the international community should work together to support the development, especially economic reconstruction of countries in transition and war-torn countries. They are the most important prerequisites for the Middle East to achieve stability and prosperity. Lastly, dialogues, consultation and cooperation is the inevitable choice to solve the hot issues in the Middle East, which is also the foundation for a comprehensive solution of the Iranian nuclear issue, as well as the working direction of Syria, and other regional hot issues. All these show the China's diplomatic concept.

Translator/ Liu Wencui

## Policy Recommendations for China's Industrial Development in 2016: Supply-side Reform

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In 2015, China's industrial development has made some progress, but it is also faced with enormous pressure. Overall, national economy operation and industrial development yields to downward pressure, leading to a gradually subsiding original growth momentum and severe overcapacity, while new growth momentum hasn't been established, and thus cannot meet consumption upgrade demands. The serious inadequacy of the endogenous growth momentum driven by innovation, along with the lack of exogenous impetus guided by government, has made industrial structure transformation more difficult.

From an industrial perspective, dual excess in the amount and structure of traditional basic industries drags them into mature and even recessionary periods. Though there is an increase in scale and interest in emerging industries, the innovation capability of critical technology and sectors is in shortfall. With the development of Internet industries, the integration with and upgrade of traditional practices is yet to take place.

From a regional perspective, eastern coastal industry has entered into a crucial period of industrial transformation, slowing down its development speed. In central China, relocating industries has caused overpopulation and pollution. In the western provinces, industrialization continues apace, it has provoked social polarization. The attempts to modernize traditional industrial sectors of the Northeast have been poorly motivated, with the stagnation acting as a downward pressure on industry.

China must resolve the industrial deficiencies in their structural systems, and enhance their supportive policies with the aim of making the modernization of industry progress smoothly, and aid the national adoption of the development concepts of innovation, coordination, ecological awareness, opening up, and sharing.

The transformation of the industrial system of China is in fact merely the transformation of its supply system and infrastructure. To make it progress smoothly, the effective guidance of the government is necessary. It is therefore crucial that the government establish reasonable and efficacious policies.

To promote the development of Chinese industry, general ideas of classification ought to be adhered to. A differentiated adjustment should

Considering China's specific industrial situation in 2015, the author, from the perspective of supplyside reform, provides six policy recommendations at the macro level to better achieve industrial structure optimization and transformation next year. Here are the six suggestions for the government: adjusting industrial classifications and regional differences; giving priority to market adjustment while supplementing with government guidance; giving priority to stock adjustment while supplementing with incremental adjustment; deepening system reform while reforming dividends; fighting against corporate monopoly while maintaining market fairness; guiding strategic emerging industries while cultivating pilot enterprises.

be adopted for industries in different stages of the industry life cycle as well as for regions with different economic gradients. Following these precepts, the government should allow the market to take the guiding role, and restrain itself to timely and appropriate interventions. Industrial adjustment should be approached in the following order: Stock adjustment, followed by incremental adjustment. After this, Supply-side reform must be prioritized, in order to maximize the ability of various enterprises to transform the economy. Obstacles to the progress of smaller enterprises must then be removed by clearing market environments, and cracking down monopolistic behaviors. Pilot enterprises should play backbone roles, while strategic emerging industries provide direction, and eventually cultivating a series of enterprises and industries having control over the value chain.

#### I. Adjusting Industrial Classifications and Regional Differences

Classification adjustment is the general idea of industry development and policy making. According to the theory of industry life cycles, different industries and regions develop at different stages and show different characteristics, and therefore strategies must be differentiated to be best applied to the unique contexts of each industry and region.

(i) Upgrading and transforming traditional basic industries, fostering and supporting emerging industries, and promoting the integration of Internet industry development.

Representing traditional basic industries like iron and steel, cement etc., which are in the mature period of the industrial life cycle, their industry growth rate has gradually declined, and they now face struggles to avoid inevitable decline. On the one hand, if the industry growth rates continue to decline, the market will continue to shrink, which makes the industry enter a recessionary period, and gradually withdraw from the stage of history; On the other hand, once new technologies and applications emerge, mature industries may re-enter the rapid growth stage, getting a second wind. Therefore, the maturity of the industry is also an important window phase of upgrading and transformation. Seizing this critical opportunity, the government should introduce preferential policies to these industries, and actively guide the introduction of new technologies and models in traditional basic industries in order to achieve successful industrial improvement and transformation.

Representing emerging industries, new energy, new materials, intelligent manufacturing etc., are in the start-up stage of the industry life cycle, with few newly-established firms' right in the market, and their market demands are relatively small, leading survival is the only problem that enterprises face at this time. Therefore, for the emerging industries,
government policy should focus on fostering and supporting them in the following way: The government should actively take the initiative to remove market barriers, and to provide conditions for more enterprises to enter the emerging industries. At the same time, the government should actively foster and support those enterprises which have entered the market, facilitating their innovation policies.

As representatives of a new generation of information technology industries, like the Internet industry, which are in the growth period of the industrial life cycle, there has been a rapid growth in the industry with emerging innovations and increasing market size. Currently in its most dynamic period, the information technology industry boasts the power and ability to permeate and transform other industries. Therefore, for the Internet industry, the policy should be oriented into tapping its innovative vitality and achieving industrial integration. The country's "Internet Plus" strategy is advantageous to support for the Internet industry. In the future, our country should continue to increase the "Internet Plus" policy support, and vigorously promote the innovative and integrative development of internet industry and other industries, realizing the comprehensive upgrade of the industrial structure.

(ii) Sticking to industrial reconstruction in eastern region, adhering to industrial undertaking in central and western regions, and accelerating industrial upgrading in northeast region

In promoting regional industrial development, national strategies including the "Western Development", "Central China Rise" and " Revitalization of the Northeast" should be carried on unremittingly. Differentiated development strategy must be formulated according to the actual situations in different regions.

With a more complete industrial system and structure than those in other regions, complete industrial development in the eastern coastal areas has kept ahead of the rest of the country. Although in recent years, entering into a crucial period of the industrial transformation, industrial development in the eastern region has slowed down, it has nevertheless achieved certain phased objectives in industrial transformation. At present, in the eastern region, traditional industries including the machinery industry, electronic industry, chemical industry, automobile industry, construction material industry, and textile industry have been basically fully formed, and emerging industries including high-end equipment, new energy industry, biomedicine industry, energy saving industry and environmental protection industry have been equipped with a developmental foundation, while the service industry has also progressed by leaps and bounds. In the future, the industrial development in the eastern region should continue to unswervingly adhere to the idea of industrial transformation, and persistently develop strategic emerging industries like new energy industry, new materials industry, high-end equipment industry as well as the bio-medical industry. Moreover, high energy consumption, high pollution and backward industries should be eliminated without hesitation. The proportion and quality of modern service industries ought to be continuously improved, striving to be the vanguard of domestic industry transformation.

The central and western regions are the strategic hinterland of China's industrial development. In recent years, with the promotion of national strategies, namely "West Development" and "Central China Rise", the industrial development speed has been accelerated, and the total economic output has been increased. Overall, an industrial structure of "two three one" has been basically formed in the central and western regions. The manufacturing industry has become the leading industry among the three main industries there. In the future, with the acceleration of industrial transfer in the eastern region, original industrial enterprises in the eastern region will provide a new impetus to those in the central and western regions, in which the industrial transfer should be actively undertaken in line with national development strategies and economic development demands, so as to achieve seamless connection. At the same time, high pollution, high energy consumption industries, which contradicts the national development strategy and green development concepts, should be resolutely resisted and eliminated.

With a glorious history, the industrial development in Northeast China has made great contributions to the development of China's economy. Its congenital deficiency of unsustainable development, which caused by an industrial structure based on resource industry and heavy industry in the northeast region, has made the overall economy in this area quickly fall behind that of in the Yangtze River Delta, Pearl River Delta region and Beijing-Tianjin region since 1980s. With unreasonable industrial structuring, uneven industrial development, redundant industries, low industrial relevancy, and low competitiveness, the developmental situation in this area has been tougher. Therefore, the industrial development in the northeast region should not only pay attention to industrial restructuring, but also lay emphasis on transforming industries with new technology and mode, to upgrade industry and enhance industrial competitiveness. Learning from "German Industry 4.0", the industries in northeastern China should take advantage of its strong industrial background to establish intelligent factories by new-generation information technology, promoting the improvement and upgrade of the old industrial base.

II. Giving Priority to Stock Adjustment While Supplementing with

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#### **Incremental Adjustment**

To deal with the relationship between market and government correctly is the basic principle of industrial development and policy making. In a mature market economy, the market, the primary impetus for industrial development, plays a leading role while the government acts as the "night watchman", which provides guidance and service.

Unfortunately, in our country, the government has obvious and strong characteristics of economic and social interference in the breadth, depth, strength and so on. In practice, due to the improper relationship between government and market, the market plays an insufficiently basic role, solidifying and normalizing policy stimulated by government administration under certain specific conditions. The government seeks or even enforces monopoly and allocation of social resources, forming an all-round "nanny" pattern. The visible hand of government stretches too far, seriously impeding the regulation of the invisible hand of the market, which brings about a series of problems, for example: the nonstandard market order; widespread improper means of seeking economic benefit; backward production factor market which results in an inconsistency between idle elements and effective demands; non-unified market regulations and all-pervading department and local protectionism. All these problems impede the establishment of a perfect socialist market economic system and the social development vitality and power, seriously affecting the smooth progress of industrial transformation and upgrade.

Therefore, the market should play a leading role in the formulation of relevant policies. Through market tools, the motivation and vitality of enterprise can be stimulated, which facilitates initiative their transformation and upgrade, so as to drive an industrial structure transforming and upgrading. At the same time, the government should strengthen the service for enterprise and market, and ensure the effective operation of the market. As for those fields in which the market fail to exercise function, the government should take the initiative to provide timely guidance, making up for market failures.

To straighten out the relationship between government and market is to accelerate the transformation of a management-oriented government to a service-oriented government. The administrative simplification and power transformation should be preceded with caution, and the administrative examination and approval system should be deepened. The government is supposed to standardize the examination and approval system by simplifying procedures and setting clear time limits. Moreover, the list of investment projects approved by the government should be amended timely through a raise of enterprise status in investment, so as to give way to the market.

#### III. Giving Priority to Stock Adjustment While Supplementing with Incremental Adjustment

The clear sequence of stock adjustment going first and increment adjustment following next is the basic logic of indust rial development and policy making. After more than 30 years' rapi d development since the reform and opening up, the industrial econo mic volume has been great. Capped utilization of labor force, natural resources, and space resources means that the incremental adjustment will be restricted by the stock, so the industrial transformation in the future should give priority to stock adjustment while supplement with incremental adjustment.

(i)Encouraging mergers and acquisitions while letting the fittest stock survive

Stock adjustment should be the main task of current industrial transformation. At present, China's economy volume has reached 63.6 tril lion, of which the strategic emerging industry only accounts for less than 10%. And traditional industries have dominated the market. Therefore, the first measure to take is to adjust the stock of traditional industries in order to realize industrial transformation and upgrading.

However, there are many difficulties in the stock adjustment due to v arious reasons. Some overcapacity industries and enterprises without competitiveness should be eliminated as soon as possible in the long run. But there are many intractable problems related to the elimination, such as staff resettlement, enterprise switching, debt resolving and so on. Besides, for some regions and industries, outdated production facilities are major resources of local tax revenue or even pillar industries, which make it mor e difficult exiting the market.

Therefore, the government should make full use of the market mechani sm to adjust overcapacity industries in the future. Enterprise merger and reorganization is an important mean to fortify competitive enterprises and eliminate backward ones. The government should actively encourage and guide enterprises to participate in mergers and acquisitions by constantly improving industry standards and policy measures, so as to create a favorable environment for enterprise mergers and acquisitions. The service management of enterprise merger and reorganization should be improved, eliminating institutional obstacles which restrict enterpri se merger and reorganization. Large-scale backbone enterprises should be encouraged to carry out mergers and acquisitions cross different regions and ownerships. Furthermore, enterprises should be encouraged to extend industry chain through merger and reorganization, which promotes the formation of strategic alliances, and to take an active part in global resource integration and management under the guidance of "going out" policy, so as to enhance international operation ability and competitiveness. In this case, only the fittest industry stock can survived through enterprise mergers and acquisitions.

(ii) Providing more guidance to investment while adjusting increment ord erly

The structure optimization of increment has a leading role in industrial structure optimization. As incremental investment is relatively easy, the state focuses more on stock adjustment, while the optimization of increme ntal investment cannot be ignored.

In the future, the government should actively guide industrial investment to emerging industries and areas relative to people's livelihood. Those key investment fields include new- generation information technology, new energy, new material, high-end equipment, bio-medicine, energy conservation, environmental protection and other emerging industries . Corporate investment in relevant areas can be increased by promoting key projects. Loan approvals for major projects and PPP (Publicprivate Partnership) projects should be accelerated through a fast-track mechanism established by financial institutions. Effective investment should be promoted to grow continually. People's livelihood projects, like new urbanization and rural construction, are important investment areas. To meet city's new demands for wisdom, green and humanity, an increased investment in the reconstruction of huts and dilapidated buildings in urban and rural areas, as well as in the infrastructure construction of supporting public service facilities is necessary. To achieve three main targets, consisting of beautiful countryside construction, village public service operation and maintenance, along with agricultural socialized service, it is necessary to increase investments in relative fields, like rural public service, agricultural production service and agricultural ecological protection.

The government should give play to the fundamental role of the market when it offers guidance to incremental investments, which can guarantee the dominant role of enterprises. Various types of social capital should be leveraged through different market modes, like an establishment of industrial investment guiding fund and PPP Corporation, etc., gaining higher investment resilience.

#### IV. Deepening System Reform While Reforming Dividends

Deepening system reform is the institutional guarantee for the development of industrial transformation. China should continue to

deepen supply-side reform, starting from financial, tax, personnel, and other fields, so as to maximize the release of reform bonuses.

Finance is not only the lifeblood of the economy, but also maintenance for industrial restructuring and upgrading. China should start with deepening the financial sector reform, while broadening financing channels for industrial transformation and upgrading, as well as reducing the cost of financing the transformation and upgrading of said entities. First of all, the advantages of policy-based finance, development finance, and commercial finance should be actively used, and support for the new generation of information technology, high-end equipment, new materials and other key areas should be increased. Secondly, a sound multi-level capital market should be established to promote the development of regional equity market norms, raising funds, transforming and upgrading modes like supporting qualified enterprises listed in domestic and foreign markets, and issuing various types of debt financing instruments. Corporate innovation, development, transformation, and upgrading should be supported by actively guiding the venture capital, private equity investment and more. In addition, key areas of large enterprise groups are supported to carry out the combination of production and finance as pilots, promoting the transformation and upgrading of enterprises by means of financing leases.

The intensity of tax reform should be increased. The support for the financial capital for industrial transformation and upgrade should be strengthened by making full use of existing channels. Investments in key transformation and upgrade areas like intelligent manufacturing, the development of "four bases", and high-end equipment should be emphasized, in order to create a good policy environment for industrial development. Social capital ought to be guided to participate in the construction of major projects, technological transformations, and key infrastructure, by operating Public-Private-Partnership (PPP) models. Innovative financial support modes should be transformed from "construction supply" to "operation supply", improving the efficiency of financial fund usage. Tax policies conducive to industrial transformation and upgrading should be implemented to promote the reform of value-added tax and improve the method in calculating enterprise research and development costs, effectively reducing the tax burden on enterprises.

Talent system reform should be improved by focusing on high level talents, professional and technical personnel in short supply, and innovative talents. The professional and technical personnel knowledge updating project should be implemented, so as to create high-quality professional talent teams. Vocational education and technical training should be strengthened by guiding a group of ordinary undergraduate colleges and universities to transform into supplied technologyadvanced institutions, and establishing a number of training bases to carry out a pilot demonstration of the modern apprenticeship, forming technical personnel with complete categories and superb skills. The cooperation between enterprises and schools should be encouraged to cultivate scientific research personnel which are urgently needed by the manufacturing industry, talents with technical skills or compound talents, while simultaneously deepening doctoral and master professional degree enrollment and pedagogical reform in related fields, actively promoting the combination of production, teaching and research. The industry talent level evaluation system should be built up and an information release platform should be established, as there is greater need for industry talent demand forecasts and perfect information database for all kinds of talents. The establishment of talent incentive mechanism will increase the recognition and rewards for outstanding talents. The establishment and improvement of manufacturing personnel service agencies can improve the flow of personnel and the use of institutional mechanisms. The efforts to introduce intelligence, leading talents and talents in short supply should be affirmed.

#### V. Fighting Against Business Monopoly While Maintaining Market Fairness

A fair market is the foundational environmental basis for industrial transformation and development, and is most threatened by potential monopoly. In market economies, freedom and order are two necessary preconditions. On the one hand, a lack of freedom will restrict competitive behavior, in which case the allocation of resources will not be optimized, and the market will fail to play its role. On the other hand, a lack of order will destroy the price system as well as supply and demand signals, causing market turmoil and a disorder of economic operations, which will ultimately hinder the development of the national economy. The monopoly, which restricts market freedom and destroys market order, clearly runs counter to the market economy. The existence of monopolies will not only disrupt market order and damage consumer interests, but also restrict the innovation and vitality of enterprises, affecting long-term industrial development.

In recent years, with the increase in size of some enterprises, monopoly in the market occurs from time to time. Paying more attention to the regulation of market monopolization, the state's anti-monopoly department has punished foreign companies one after the other, like Qualcomm and Benz. In the future, the relevant government departments should maintain a tough stance against market monopolization, protecting good competitive environments. To crack down on monopolies, first of all, the government should cease worship of GDP development. Although, monopoly may increase economic value added as well as fiscal income in some areas in a short period, it will also bring an endless flow of disastrous consequences to industrial economic development in the long term. Secondly, the government should reform itself and break down administrative barriers which have resulted in currently existing monopolies. Related research shows that administrative monopolies caused by government interventions into the market have a great effect on prohibiting the enterprise and industrial-level innovation.

In addition, unfair competition and practices like selling fake and shoddy commodities, breaking promises, and dereliction of duty will also affect market fairness. Relevant government departments should effectively strengthen supervision, improving the creation, utilization, management and protection mechanisms of intellectual property rights. In order to create a good environment for enterprise production and operation, unfair competition behaviors like manufacturing or selling fake and shoddy commodities should be severely cracked down on and punished accordingly. The government should actively promote the establishment of enterprise credit systems and enterprise credit databases, as well as set up and improve the dynamic evaluation of corporate credit and credit rewarding and punishing systems. The enterprise product standards, quality, safety self-declaration and supervision systems should be implemented with a stronger sense of corporate social responsibility.

#### VI. Guiding Strategic Emerging Industries While Cultivating Pilot Enterprises

Strategic emerging industry, the ultimate direction indicator of industrial transformation development, is not simply investing in related industries, but seizing its commanding heights from the top of the value chain. Only in this way can we sit as equals at the same table of international competition with the United States, Germany and other developed countries.

At this stage, a large part of China's strategic emerging industries are still in the bottom of the value chain, charactering with low technological content and value-added, just like the processing or assembly industries. Take the photovoltaic industry, which belongs to the new energy industry, as an example. Under the guidance of industrial substitution, enterprises are all rushing to launch PV production projects in many areas due to the lack of core technology and the low entry threshold of cell-andmodule manufacturing technology, which results in an excess production capacity and an entry into cost-competition phase. In the future, China's strategic emerging industry development should orient itself towards high-end industries on the top of the value chain, charactering with high technological content, high entry technical threshold and high value additions, just like research and development design as well as brand marketing. For example, in the new-generation information technology industry, it's essential to increase the integrated circuit design level, and develop a core general chip. In the new material industry, it's also vital to promote development of key technology and equipment for new material preparations, including advanced smelting, solidification, vapor deposition, profile processing and efficient synthesis.

It is important to notice the role played by "helmsman" enterprises in the development of high-end strategic emerging industries. A pilot enterprise, with control ability and leading role in the industrial system, is very significant to the development of industrial transformation and upgrading. Especially in this period, full of emerging new standards and technologies, the importance of pilot enterprises cannot be overstated. Different technologies and standards are springing up, competing with each other, and increasing the uncertainty of industrial cooperation, so that the cooperation between innovative enterprises has become very difficult, and the pace of new technological development and maturity has been greatly slowed down. "Helmsman" enterprises can control upstream and downstream enterprises, and affect complementary enterprises in the same industry. By promoting innovative collaboration, pilot enterprises can speed up technological innovation, eventually leading to the maturity of emerging industries.

The choice of industrial pilot enterprises should be mainly among strategic emerging industries, which take control over the industrial chain and favor the transformation and upgrading of industrial structure. Therefore, the state should vigorously support the development of "helmsman" enterprises like new-generation information technology, new energy, new materials, bio-medicine, high-end equipment manufacturing industry, high-end modern service industry and others, promoting the growth and development of these enterprises.

There are three aspects to supporting and fostering pilot enterprises. First, the policy of reform and opening should be unswervingly adhered to. Renowned international companies related to intra-industry should be actively introduced, accompanied by a healthy state of mind, preferential policies, and a sound system. Those enterprises, such as research and development, design and other aspects, which are in key sectors of the industrial chain, have controlling force in the value chain, and thus should gain more support. Second, in the form of tax incentives and financial

subsidies, innovation activities are to be actively supported. With a highlight on cultivating the innovative abilities of pilot enterprises, their international competitiveness and control force of the value chain will be stronger. Third, related enterprises are actively encouraged to provide supporting production for industry pilot enterprise innovations, striving to build an industrial cluster with a core of "helmsman" industries, so as to give full play of the industrial leading role boasted by pilot enterprises.

Thus, the development of the whole industry ecology and industry system can be driven by creating and nurturing industrial pilot enterprises, to promote industrial restructuring and upgrading, and thereby promoting Chinese industries' international influence and value chain control force.

Translator/Wang Hui

### Technology Innovation and Industry 4.0: Opportunities and Challenges in Chinese Industrial Development in 2016

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Currently, Chinese industrial development is at the special and critical moment of global economic cycles. New industrial reform starts to happen where industrial development faces serious technological changes and fundamental changes occur in mode of production and pattern of consumption. Economic cycles and technological changes provided for Chinese industrial development the opportunity to "overtake around curves," as well as severe challenges for improving industry energy level. In the future, Chinese industrial development will face both opportunities and challenges.

In the long term, the supply and demand changes driven by technological innovation directly determine the future direction for industrial development. With the change of mode of production and pattern of consumption, industrial development will show a series of new trend like personalization, intellectualization, modularization, connectivity, mass customization and so on.

In the short term, in terms of demand, the motive force of industrial development gradually moved from investment-driven to consumptiondriven. This will not only bring the industrial structure changes, but also improve industry energy level. While in terms of supply, government intensifies efforts in policies to lead the industry energy level improvement and actively promote the integrative development of traditional industries and emerging industries, which will help the industry transformation become much faster.

However, the industrial transformation is a battle to burn Chinese boat. Domestic industrial transformation is bound to cause the reconstruction of international industrial specialization. In high-end industry, China will compete against developed countries to seize higher position in value chain, while in low-end industry, industrial transformation will close down backward production facilities gradually and speed up to transform low-end industry to newly emerging developing countries. Therefore, Chinese industrial transformation is an arrow left by, which if it failed, domestic industry would be at the risk of hollowing out.

1.New industrial revolution is speeding up. Technological reforms rebuild the mode of production and pattern of consumption.

In the future, Chinese industrial development will face both opportunities and challenges. Industrial development will show a series of new trend. Domestic industrial transformation is bound to cause the reconstruction of international industrial specialization. After the financial crisis, the global economy has entered the historical period of rotation of old and new economic cycles. The rotation of the economic cycles also foreshadowed the new industrial revolution. The essence of new industrial revolution is the integration and innovation of technology like NGIT, new material and energy. In this trend, great innovations such as NGIT, robotics, 3D print and new material technology keep emerging and become mature.

NGIT is the core of this industrial revolution. Traditionally, internet and information technology was only the tool for person to person communication. With the integration of connectivity, digitalization and intellectualization, NGIT represented by new generation of communication network, internet of things and cloud computing will become more mature, keep infiltrating different links in manufacturing industry and finally the whole industry chain, lead new series of production, service, production system and industry and create new developmental pattern instead of the old technology economic pattern.

New material technology is the basis of this industrial revolution. The new generation of production materials will choose CNT, ceramic nano composites, new carbon fiber and other new materials to make the future production tougher, lighter, more energy-saving and more durable. Meanwhile, new material technology will completely change the mode of production from traditional reductive to additive production, with onestep building and precise manufacturing which greatly reduce time and cost for production and manufacturing.

New energy technology is the important safeguard for sustainable development in industry. In the current developmental mode of industrial economy, people's production and lifestyle basically depend on the production and use of fossil energy. However, people have gradually depleted the fossil energy, which makes the question of new sustainable production and living energy and power become the important revolution center. The new energy technology represented by solar, wind technology, ocean and nuclear power technology is now playing the role, taking place of the original industrial structure and production. Besides new energy to generate electricity, new application fields like new energy vehicles or houses are becoming the essential consumer goods.

New technology represented by information technology, new energy and new material is becoming more and more mature. In the longterm, technological changes will lead the change of mode of production and pattern of consumption in the end, and then affect the direction of industrial development.

1.1 Personalization, integration and facilitation have become new trend of

consumer demand.

New technology makes diversified consumer demand possible. There are new trends in consumer demand.

First is the personalization in consumer demand. With increasing income level, consumers prefer to consume in their own ways, while the traditional service industry system featured with standard products and service cannot satisfy consumers' need for personalization in the future. In fact, it is the consumers' specific demand information and data that are behind the personalized need. Big data of consumer demand is the result of huge number of consumers, different information because of different individual need and continuously changed need. Traditional technology is not powerful enough to deal with big data of consumer demand, but with information technology develop and big data technology become mature, consumption big data become more and more important. Dealing with these big data, sending to smart device to do the calculation, then adjust equipment, prepare material, continue automatic processing and finally produce the productions that meet the personalized demand.

Personalized demand has shown its effect in China. Through e-commerce platform, consumers can by T-shirts and with their photos on them ,or bottles and pencil vases with their own names, or simple fashionable handbags and ornaments with their own LOGOs, or custom-made classic furniture. In the future, the trend of personalized demand will become more and more dominated.

Second is the integration of consumer demand. Consumer demand is personalizes as well as diversified. To have the best customer experience, consumers wish that manufacturing industry and service industry can offer package solution based on personalized and diversified consumer demand, which save the search time and cost for consumers realize effective coordination between productions and service to provide more accurate and better service for consumers.

The rapid development of Internet industry offers effective solution to the integration of demand. No matter "platformization" or "conceptualization," the commercial design approaches are ultimately the basic requirements for the integration of consumer demand. It is not rare in Internet industry. For example, Tencent treats instant message as the entry of scenario and creates multiple communication, entertainment, shopping and finance platform around the basic demand of consumer communication. Alibaba treats shopping as its entry of scenario and creates the ecological empire containing online shopping, Internet finance and logistics service around the basic need of consumer online shopping to satisfy the integration of consumers. In the future, the influence of integration of consumer demand will keep growing, further expand to traditional industry and replace completely traditional manufacturing and service industry system.

Third is the facilitation of consumer demand. Consumers always want to consume in the most facilitated and the most energy-saving way. No matter how deep or complicated the technology is, it always appears in front of consumers in the simplest form, because the technology and channel are only methods for consumers, not final goals. Meeting their demand is the final requirement to consumers.

Therefore, traditional industry or newly emerging industry, to satisfy the facilitation of consumer demand is the basic premise of industrial development. Nowadays, O2O has become the mainstream of pattern of consumption, mainly because it dynamically integrates easy accessibility of online products service and the convenience of offline products service experience, to create a more convenient path than single pattern of consumption, which is favored by consumers. In the future, the trend of facilitation of consumer demand will generate more opportunities for industrial innovation.

1.2 Intellectualization and mass customization lead new revolution for mode of production.

The present mode of production is machine to machine and mass standardized production, which gradually shows the shortcomings and cannot meet the new need for industrial development. Currently, the intelligent mass customization supported by Internet springs up and developed in many ways.

The center of new production mode is smart manufacturing. Smart manufacturing is based on automatization, connecting different equipment through data interaction by internet of things, information and communication technology and big data analysis, and make a whole of outside and among the factories.

Driven by smart manufacturing, productions, equipment and management will form an organic whole of self-coordination and self-adjustment. Each production will have all kinds of information of the whole supply chain and life cycle. The equipment can realize self-organization taken by the complete production value chain. The management can determines the production process flexibly according to the current situation. Manufacturing system is composed of 6C: Connection—sensor and Internet, Cloud—data from any time or for any need, Cyber—mode and memory and Customization—customized service and value.

The productions under 6C are actually the integration of function and

data, with function to be used and the vehicle of information. Productions can record everything automatically during their production process. Meanwhile, they can help operation and monitoring around environment. For an instance, a product will change according to outside temperature and humidity after it comes out of the factory, and automatically remind supervisors to do what kind of extra adjustment actions.

Factories under 6C can realize smart manufacturing in the chain and the self-adjustment in production. In 2013, PiWeb of Zesis Group in European machines actually reflects above theory. PiWeb can collect measured data by machines in factories of different links of chains and from different areas. In the future, the collected information can figure out automatically how to adjust through systemic analysis and send back to different factories to realize real-time intelligent adjustment.

The mangement under 6C can realize transparent production and predicted production. There exist many potential unpredicted factors in present manufacturing including the decreasing capacity in processing procedure and occasional loss efficacy of components, scrap and reworks and decreasing effectiveness of the whole equipment. Through transparent with, elaborating and quantifying those uncertainties, production organizers objectively evaluate their capability of manufacturing and equipment, realize predicted manufacturing to reduce cost of maintenance, to improve the operation efficiency and to improve the production quality.

Intelligent mass customization has three ways to develop technology. The first way is 3D print, which can meet the personalized need because of separate print. However, a lot of obstacles in print materials and low printing speed prevent the widespread use of 3D print technology. In the long term, 3D print is bound to cause great changes in manufacturing industry. The second way is industry 4.0. The system is based on the internet of things and Internet, as well as the combination of cyber and physicality, which is a production system able to mass customization, quite different from traditional mass standardized mode of production. The third way is the integration of modular division to divide productions into modules according to functions and combine them according to need to satisfy personalized consumer need.

## 2. The driving force of industrial development has moved to consumption-driven to drive industrial structure transformation.

In short term, domestic industrial development is now under rebalancing, where driving force moves from investment-driven to consumptiondriving. The rebalancing will not only bring three changes in industrial structure, but also promote the industrial energy upgrading. 2.1 Consumption-driven gradually dominates. The proportion of service industry keeps rising.

After the financial crisis, Chinese economic development has new changes. The economic development has entered into "New Normal," from high-speed growth to medium-high speed growth, where the effect of investment-driven economic growth gradually is replaced by the influence of consumption-driven growth. In three quarters in 2015, total social retail sales of consumer goods increased steadily, with 10.5% year on year, in which total online retail sales increased 36.2% year on year. Consumption increases faster than investment and net export. Consumer spending accounts for GDP growth for 58.4%, with a year on year increase of 9.3 percent, 15 percent more than investment contribution rate. Consumption has become the dominated driving force of economic growth.

The change of the consumption-driven economic growth is also promoting the transformation of industrial structure, with the increasing proportion of tertiary industry. Up to September 2015, the added value in tertiary industry increased to 51.4%, accounting for domestic economy more than 50%, increasing 2.3 percent year-on-year. Industrial structure gradually moves from industry-dominated towards service industry dominated.

The three industry structure is still waiting for transformation. Based on the experience in developing countries and regions, the proportion of tertiary industry can be up to 70% of GDP. Thus it can be seen that the future position of tertiary industry will be promoted, and the influence of consumption will be enhanced.

2.2 The increase of quantity brings the improvement of quality. Consumption upgrading promotes increase of capacity.

With the increase of consumption volume, the position of consumption keeps being promoted. Consumption not only increases the speed of industrial development, but also determines the direction of development. The future industrial development will pay more attention to the trend of consumer demand. Personalization, integration and facilitation of consumer demand upgrading will force domestic industry to upgrade and restructure.

To meet the personalization, integration and facilitation of consumer demand, we cannot forget the development of technology and fully developed industry. The rapid development of consumption will attract more and more enterprises to actively lead transformation, to use new technology, to realize energy level upgrading and meet the change of demand. The data of three quarters in 2015 show that though economic growth faces downward pressure, industries like high-tech industry still grow and new industry, new formats, new productions, new economy and other new growth keep generating and emerging and become one of the highlights in 2015 economic development. From January to September, the online retail sales increased 36.2% year-on-year, of which the physical goods increased 34.7%, faster than traditional retail industry. The increasing speed of added value in high-tech industry is up to 10.4%, 4.2 percent higher than the increasing rate of industrial enterprises above designed size.

In the future, there will be more new technology generated by consumer demand upgrading. Newly emerging industries use new technology to produce new productions and open new markets. Traditional industry use new technology to refresh old technology and create new node. Under this circumstance, domestic industry will realize the transformation of industrial structure and upgrading of industrial energy level.

## 3. Intensified efforts in government policies to accelerate the integrated development of industrial innovation.

The Central Leading Group on Financial and Economic Affairs proposed in November that the focus on government policies will be shifted from demand to supply. In fact, China is strengthening the policies in supply and need. The two guiding documents: "Made in China (2025)" "Notice of the State Administration of Taxation on Issuing the Action Plan of 'Internet + Taxation'" offer definite direction and clear path for industrial development of innovation and integration.

3.1 "Made in China (2025)" plan makes the direction of development of intelligent manufacturing clear.

Manufacturing is the main part of national economy, foundation of the country, the way to make nation prosperous and powerful. Nowadays, new scientific technology revolution, industrial changes historically intersect with Chinese accelerating the transformation of development pattern, which provides an excellent historic opportunity for Chinese manufacturing transformation and upgrading. During this critical period in history, the national development planning "Made in China (2025)" clarifies the wonder and indicates the direction for domestic industrial development.

It is planned that the ultimate goal of Chinese manufacturing development is to become the leading manufacturing power. The government proposed the steady "three step" strategy. The first step is to enter the ranks of manufacturing power up to 2025. The second step is to improve national manufacturing level to the average of the global manufacturing power. The third step is to strengthen the position of manufacturing power and improve the comprehensive strength to the leading global manufacturing power to the 100th anniversary the founding of New China.

Guided by "Made in China (2025)", our smart manufacturing will face unprecedented development opportunities. NGIT, high-end devices, new energy, new material, biomedicine and other strategic industries will enter the channel of rapid development.

In the future, NGIT will be deeply integrated into manufacturing. 3D print, mobile internet, cloud computing, big data, bioengineering, new energy, new material and other fields make new breakthroughs and are used widespread. Manufacturing industry will form new mode of production, industrial form, commercial mode and economic growth point. Smart manufacturing based on intelligent devices and factories in cyber-physical system will lead changes in manufacturing mode. Crowd-sourcing web, collaborative design, mass customization, precise supply chain management, complete life cycle management, e-commerce will reform the industrial value chain system. Wearable smart things, smart home appliances, smart cars and other smart terminal products will continuously expand new fields for manufacturing industry.

3.2 "Internet plus" initiative created a clear path for industrial integrated development.

NGIT not only can restructure and upgrade traditional manufacturing industry, but also with its actual much wider range of application, can deeply integrate with different economic and social areas to push forward the technological development, improvement of efficiency and structure revolution, to improve innovation and productivity of entity economy. The "Internet plus" initiative proposed by the government just hits the trend accurately, make clear the industrial path for integration of Internet and other areas and innovation development, which is significant for Chinese economic quality improvement and upgrading.

In the future, Internet will deeply integrate with modern agriculture, improve the production, operation and management level of agriculture to form network, intelligent and fine modern "planting, breeding and processing," the new pattern of eco-agriculture. Internet will deeply integrate with smart energy to promote the flattening, web-based energy system, to push forward the energy production and mode of consumption revolution, to improve the utilization efficiency of energy and to save energy and reduce emissions. Internet will deeply integrate with financial service. The integration and innovation with banks, securities, insurance and fund, shall provide various safe convenient financial products and service, to better satisfy investing and financing requirement of different levels, and to form some of the Internet financial innovated enterprises with great influence. Internet will deeply integrate with benefiting people service to create new service like medical treatment, health, pension, education, tourism and social security based on Internet, which can improve utilization efficiency of resources and reduce service and consumption cost. Internet will also deeply integrate with logistics service to create cross-field and cross-border logistics information service platform. The platform can improve the efficiency of logistics supply and need information connection and utilization. Big data and cloud computing are widespread used to improve the automation, smart level and operation efficiency of logistics storage and reduce the logistics cost. Internet will deeply integrate with ecological construction to form network to dynamically monitor the resource and environment caring capacity covering main ecological elements to realize the connectivity and opening sharing of ecological environmental data to promote the easy access to the recycled resource trading, the interaction and the transparency, and to promote the greening of lifestyle and mode of production.

#### 4. International industrial distribution faces restructuring, while Chinese industry faces the challenge of hollowing out.

Under the circumstance of global industrial revolution, not only China faces great pressure of industrial transformation and upgrading, the whole international industrial systems are also experiencing turbulence and changes. Chinese industrial structure transformation is bound to happen with national industrial division reconstruction. Chinese industrial development is between the attack of the traditional developed countries and newly emerging latecomers.

4.1 USA and Germany taking advantage of traditional industry, occupy high-end industries from software and hardware.

One of the earliest countries to develop CPS is USA. The essence of CPS is to combine the industrial big data, their information system and American own Silicon Valley type, to make sure the American leading position in the future smart manufacturing. This is also one industrial strategy to occupy the high-end industry from the side of software.

USA have built a set of innovative tools to make predictions about the uncertain information based on the things collected by data system, which can help managers be more "informed" when they make up their minds to realize part of transparent productions. The set of tools include integration, predictions, analysis and visualization. For example, the algorithm in the software called Watchdog AgentTM is divided into four parts: signal processing and feature extraction, health assessment, performance prediction and failure prediction. With the help of radar map,

fault graph, risk map and health deteriorating curves, the software can send the information of factory equipment effectively to realize the smart production.

However, Germany tried the opposite way of USA: the side of hardware. In 2011, Germany proposed the idea of "Industry 4.0," which focused on the construction of smart factories. The interconnected smart factory system created through the national strategic cooperation and the advanced manufacturing equipment industry make Germany become the pioneer of new industrial revolution.

DFKI along with 10 Germany enterprises built the first factory model reflecting "Industry 4.0" in the world. 10 cooperative partners connected by the program called Smartfactory individually created one system mode or offered related cross-application technology. The model shows the process where innovative cooperation and work among enterprises from different fields translate the idea into goods and the wish into reality. The model is an example of organization of production under 6C.

	Germany	USA
National Advantages	advanced manufacturing machines	software and information system
Development themes	smart factory	smart manufacturing
Specific operation	under the nation to develop experimental smart factory and equipment in cooperation	to encourage the development intelligent monitor software and to study the corresponded big data and data application
Examples	Smartfactory mode	Watchdog AgentTM software

Figure 4.1 The paths of new industrial reform in Germany and USA Source: Rui Mingjie, 2014.

Chinese industries develop smart manufacturing and transfer to high-end industry, which will definitely compete against Germany and USA.

4.2 Newly emerging countries taking advantage of cost, actively attract the transfer of labor-intensive industries.

Behind the active transformation of industrial structure to high-end industry, the labour-intensive low-end industries face less and less preferential policies. At the same time, the end of demographic divided directly increases the labour cost. According to the "Report of Global Manufacturing Cost Change" released by the Boston Consulting Group, if we set the American manufacturing cost as 100, Chinese cost reached 96, only 4 point lower than America. It is obvious that low cost is no longer the competitive edge for Chinese industry, in the future the labour-intensive industries that seriously depend on cheap labour cost must be shut down more quickly to transfer to new latecomers.

In fact, the industrial transfer of low-end industries is happening. Take the example of Japanese and Korean foreign-owned enterprises, they started to withdraw from Chinese textile, footwear and jewelry processing industries after financial crisis. According to the data from KOTRA and Export-Import Bank of Korea, the number of Korean enterprises with new legal persons in China decreased from 1301 in 2008, 901 in 2010 and finally to 817 in 2013. Korea-invested enterprises, mainly in Shandong Province, are now decreasing with the rate of 500 every year. Japanfunded enterprises show the same trend. In 2005, there were about 2000 Japan-funded enterprises, which now decreased to around 1000. India, South-east Asia and other countries with low cost have become the new attraction to labour-intensive foreign-owned enterprises. Panasonic, Samsung, LG and other enterprises continuously established their factories in India and made fully use of the low labour cost there. Even many Chinese enterprises come to India. Any Heavy Industry, Weichai Power, Haier Electronics and some chemical enterprise began to build production base in India, while Huawei, MIUI, GiONEE and other communication and handset makers also actively make plans to build factories in India. The trend that low-end industries and links transfer to low cost countries is irreversible. In the future, with the implementation of "One Belt and One Road" initiative, there will be more low-end enterprises quitting Chinese market and entering newly emerging market. It is the initiative selection of Chinese industrial transformation and upgrading, the logical result of industrial energy level upgrading.

However, we must also realize that Chinese industrial transformation upgrading is an irreversible process, which means that transformation is battle to burn our boat. In the field of high-end industry, China will directly compete against developed countries in the value chain of smart manufacturing. For the low-end industry, industrial transformation will gradually put an end to outdated production facilities and speed up the withdrawal of low-end industries, which will make blank space in some of the areas within such short time. Apparently, it is a difficult process with many risks. Once it fails, domestic industry will at the risk of hollowing out, which is the biggest challenge in Chinese industrial development.

#### 5. Conclusion

Chinese industrial development and industrial adjustment is a significant aspect in supply sector. We think we should insist on the general thinking

of deepening the market reform and industrial separated adjustment and take differentiated strategies to industries in different industrial life cycle and areas belonging to different grades. Traditional basic industries should be upgraded and rebuilt to cultivate and support new industries and promote the integrated development of Internet industries. We should steadily adhere to industrial transformation in east areas, keep industrial undertaking in west areas and continue the industrial upgrading in northeast region.

During the process of adjustment, the market should play the dominated role with the timely and proper guidance of government. There is a clear sequence of industrial adjustment, where stock adjustment comes before and incremental adjustment comes after. We should concentrate on supply system reform and play a principal role of enterprises in industrial transformation and upgrading from the aspect of financial, fiscal and tax, talent reform. Improve the market environment and counter monopoly to clear away obstacles for SMEs innovative development. Play the pivotal role of helmsman enterprises, in the direction of strategic new industry and grasp the helmsman enterprises to cultivate some enterprises and industries with the control of value chain.

We should look forward to the future. Chinese industrial development faces opportunities and challenges. In the long term, the change of supply and demand caused by technological reform directly determines the future direction of industrial development. With the change of mode of production and pattern of consumption, industrial development will have a series of new trend of personalization, intelligence, modularity, connectivity and mass customization. In the short term, the driving force of industrial development moves gradually from investmentdriven to consumption-driven. It not only brings industrial structure change, but also improve the industrial energy level. The increasing national policy support strongly leads the industrial energy improvement, actively promotes integrated development of traditional industries and new industries, which will accelerate the industrial transformation development.

However, Chinese industrial transformation will cause the reconstruction of international industrial division and make domestic industries at the risk of hollowing out. In high-end industry, China will compete against developed countries face to face to control the high end in value chain. For low-end industry, industrial transformation will gradually close down the outdated production facilitation. Low-end industries will speed up to transfer to emerging developing countries. Therefore, Chinese industrial transformation is bound to be a battle to burn our boats.

Translator/Shi Ying

### A China's Risk: The Big Inventory of Real Estates

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In 2015, Central Economic Work Conference put the problem related to real estate as the second priority in all five major economic tasks including reducing productivity, lowering the inventory of real estate, deleveraging, decreasing costs and promoting the development of slow industries.

Considering the massive pressure real estate problem brought to China's economy, it's necessary and timely to make such a decision. According to National Bureau of Statistics, the national inventory of commercial housing in the end of November 2015 is 6.96 billion square meters. Given the average price of commercial housing sales-6821 RMB per square meters-from January to November, total value of these properties for sale is 47,000 billion RMB. Less than one third of the investment in building these commercial housing is from property developers and the rest of the money all came from bank loan or financing of shadow banking. An inefficient or overdue capital return to the investment will shortly bring a big strike to China's financing system. So we can say that those unsold properties are indeed a potential disaster for our economy.

Even worse, the total area of commercial housing under construction has reached 72.4 square meters until the end of November 2015 which is nearly seven times the sales area of commercial housing from January to November 2015. This means a longer consumption cycle of property inventory because it takes as long as 7 years to sell all of the existing commercial houses. Besides, the big surge in China's property sales in 2015 was the result of incentives coming from numerous government policies. In 2015, from January to November, the sales of commercial houses is 10.9 billion square meters with an increase of 7.4 percent, which is just a little bit lower than the record high sales in 2013. It's hard to tell that such a positive sales of commercial housing will continue in the coming years since most of the necessary demand for properties has been met. Therefore, the big inventory of real estate will become one of the biggest concerns for China's economy in the future. Our studying team believes that the demand for improving housing conditions from current urban population has been very small.

The 34-35 square meters per capita in China's cities and towns equals to 28-29 square meters in the international standards, which is the same level as that of moderately developed countries. The figure of relatively

In today's China, the big inventory of real estate comes as a tricky issue. However, the real problem is not about the imbalance between supply and demand. Therefore, in order to promote China's economic development in new normal, what should we do? developed countries in middle and East part of Europe and Korea is 26-27 square meters, which suggests that the demand for housing in China's towns and cities has been achieved in advance. And the amount of vacant housing in towns and cities has been increasing, most of which are newly built houses. According to estimation, 50% of these vacant houses are less than 10-year-old, 90% are less than 20-year-old and only 5% to 8% are old houses which are in desperate need of reconstruction.

Decreasing inventory of real estate means the necessity of reducing the productivity of real estate industry. In 2015, the investment in real estate has dropped dramatically in a lot of cities with a national increase of 1.3% from January to November, which was a record low rate since housing reformed policies had been issued. And the figure had been dropping since December 2013. Since 1.3% is calculated on the base of 2014's figure, which is in nature a big investment, we can see that investment in 2015 still means a large sum. From January to November in 2015, the investment into property building is 87,700 billion RMB, and the area of properties under construction is 14.06 billion square meters with a decrease of 14.7%. It would require more than 7 billion residents living in towns and cities to increase 2 square meters per capita per year in order to consume all of these additional newly-built houses. As I pointed out before, the demand for an improved housing condition from urban residents is small, so lots of people try to solve this problem by promoting new residents and migrant workers who are potential citizens to buy local commercial houses. However, with Chinese urbanization stepping into "deep water area", the number of new citizens has been declining and all of these people could only consume 7 billion square meters, thus urban residents still need to buy 1 square meter per capita to consume the rest.

But reducing productivity means to slow down the development of real estate industry, which will bring a bigger pressure to local fiscal taxation, especially considering the fact that lots of local governments' capability of debt payment is highly relevant to land-transferring fees, even tax revenue is much dependent on real estate industry. Members of our studying team once did a calculation about the dependence degree of local taxation on real estate industry in Jiangsu Province and they found that direct tax on real estate accounts for 27-28% of local revenue while that figure of indirect tax is 10-12% in recent years. So we can see that tax related to real estate industry has become a large part (38-40%) of local revenue in Jiangsu Province. Clearly, among all kinds of fields in Jiangsu, real estate has been the biggest contributor to local revenue. Apart from the shocking figure, the income growth effect resulting from taxes on estate is remarkable. According to estimation, elastic coefficient of direct taxes on real estate against GDP in Jiangsu Province is 1.73(1% increase in

GDP, 1.73% increase in direct taxes on real estate); elastic coefficient of indirect taxes on real estate against GDP in Jiangsu Province is 2.07(1% increase in GDP,2.07% increase in indirect taxes on real estate);and elastic coefficient of total revenue against GDP in Jiangsu Province is 1.83, which is way higher than that (1.2%) of taxes on other industry or field.

Direct taxes on real estate include: tax on urban construction and maintenance, tax on real estate, tax on the use of urban land, land VAT, tax on field occupation and tax on deeds. Indirect taxes on real estate include: business tax, income tax paid by developers. Meanwhile, the slack in real estate industry brought a big damage to the development of other industries in the same industrial chain such as steel, coal, cement, construction materials and furniture etc. So local governments, facing the high inventory of commercial houses, are now in a dilemma:maintain house prices or maintain property productivity? Keeping house prices means reducing productivity which will shortly damage the economy; keeping property productivity requires the same or further development of real estate industry, which is going to disturb the unsteady price of commercial houses. Such a dilemma is originally the bad result of the development of traditional urbanization.

More importantly, a huge spatial imbalance exists between real estate demand and supply. The demand for commercial houses from new citizens during urbanization mainly comes from first-tier and second-tier coastal cities on eastern part of China where the inventory of real estate is not really an issue, even some real estate markets are required to make up the inventory in order to counter with the surging housing price. But the situation is totally different in third-tier and fourth-tier cities where the inventory is indeed a big issue. So it's much more difficult to tackle with this inventory problem.

According to statistics from the sixth national population census in 2010, the national population growth from 2000 to 2010 is up to 73.89 million people, among which the population of Guangdong Province accounts for 24%, Zhejiang 10.4%, Shanghai 8.5% and Beijing 7.8%. We can see that population growth from these four provinces and cities accounts for more than half of the national population growth. In terms of cities, population growth from migration in Shanghai, Shenzhen, Beijing, Dongguan and Guangzhou is 34.7 million people. Besides Chengdu and Wuhan, cities which rank before 20th in terms of population growth from migration are all coastal cities with a total growth of 64.83 million people.

In our team's opinion, the essence of supply side reform is to increase the allocation efficiency of factors. Thus, an important task is to improve the spatial allocation efficiency especially the spatial efficiency of land. The

imbalanced spatial distribution of land is the result of China's planned economy, which is the origin of high inventory of properties in third-tier and fourth-tier cities. We should make good use of market mechanism while following the rules of city development and population migration to deal with the problem.

On December 2015, the first necessity released by the Central Urban Work Conference is to follow the rule of urban development. Our research team believes that the law of aggregation is the most important one among rules of urban development, and we need to realize the development of local industrial specialization, and further achieve a balanced regional development. A balanced regional development is necessary for the achievement of an inclusive and balanced development, and necessary for economical development in new normal. However, the purpose of regional balance is not the balance between population and economical scale but the realization of balanced income per capita in different areas, which depends on the flow of population and labor force. In the past, local governments on eastern part of China overlooked population growth from migration and surging housing price while making policies towards regional development. Practices adopted by local government like decreasing land for construction and drawing a clear line of urban space were contributors to the surge of rent and house price, which put a huge damage to the economical scale and urban competitiveness in eastern metropolises. In contrast, local governments in middle and western part of China still maintain a big supply of land for construction while overlooked local population decreasing from migration, which results in a huge amount of vacant commercial houses.

We believe that the real problem in China is not about the shortage of demand but about the fact that our supply cannot satisfy our demand including the demand for a people-oriented urban development. According to necessities released on the Central Economic Work Conference on December 2015, the supply side reform is to supplement the shortage of supply , and to meet the demand, in real estate and land, which means that the supply of land for construction should be based on the demand from migration growth , rather than defying the law of urban development.

Translator/Li Ziyan

### Self-governance and Shared Governance in the Interconnected World: China's Layout for the International Order

Strategic Report from School of International Relations and Public Affairs, Fudan University

To establish a stable, prosperous and impartial international order is the common cause of every nation's diplomacy. Several regional orders once co-existed in human history. The creation of the United Nations after the Second World War represents the exploration of 50 nations in the pursuit of a universal international order. However, the outbreak of the Cold War dragged the world into antagonism again. After the Cold War, the United States tried to build a new world order dominated by itself but the outcome was not desirable. Since the turn of the century, the world has showed signs of disorder and anomie. The establishment of the international order once again became a leading topic for discussion in international relations.

Why would the multipolar international system turn into the antagonistic bipolar system in the end? Why do tension and mistrust emerge between developed countries and emerging countries? Why do partially ordered world always come with the disordered part? Why does there lack effective domestic order to support the international order? Why do people lean on antagonistic worldview to ponder over the international order? The conflicts mentioned above are primary obstacles in the cause of establishing the international order. Needless to say, China would harbor the listed "why" to think about its planning and design of the international order. These questions and conflicts are not only the consequence of policies but also epoch-making theoretical problems. As the report reveals, the first breakthrough in the political civilization of mankind lay in the state formation, which provided residents in specific regions with orderly political community life. The second breakthrough depends on the exploration of an orderly political community in greater scope where diverse countries could co-exist.

#### 1. Antagonism and coexistence

In the past, the pursuit of the universal international order was restricted by either the dualistic thinking or the monistic thinking. Dualism is the position that the world should be divided into two opposite parts while self-centered monism arrogantly upholds that the world should be organized by unilateral values, standards and rules, which leads to a favorable international order. However, neither dualism nor monism can lead to a complete international order. Sometimes, two strong powers The world has developed into a community with a common future. Therefore, it is of vital importance to create an orderly, harmonious climate for their coexistence. As a pushing hand for the new consensus and reforms, China should strive to play a constructive part in the establishment of the international order. are seen antagonistic towards each other; sometimes, partially ordered world are seen to come with partially disordered world. After the Second World War, the confrontation between the United States and the Soviet Union belongs to the former type while America's one-sided endeavor to build the world order after the Cold War is a demonstration of the latter. Both attempts proved to be ineffective in the end. The trend of political pluralism has become increasingly obvious. If we follow the same old path in the history, great powers will inevitably form various alliances and go against each other. In recent years, some countries have curtly put protocols unable to pass in the UN Security Council to vote without sufficient negotiation and artificially created split and veto situation in the UN Security Council; as for the world opinion led by the west, diplomatic vocabularies consistently used in the Cold War become popular again; some nations seems to anchor their hope on creating external war to transfer the internal economic crises. All of these are alarming to us.

People need to emancipate themselves from the old worldview and embrace the new reality of interconnection. In the universally related and interconnected world, it is unwise to establish an international order by splitting every part and putting them into confrontation. An interconnected world is also a symbiotic world where every country has close ties with each other. We hold that such symbiotic worldview is indispensable for us to finger out a new order in the interconnected world. To some extent, it represents China's unique reflection towards the international order planning. Moreover, it is not China's unilateral willingness but a consensus shared by more and more countries and social organizations.

First, countries in the world should share common values, seek utmost consensus and realize coexistence in the end. There is an old saying in China, "no common goal, no common cause to cooperate." But this thinking is unsuitable for the current interconnected world; the religious order and universal values advocate "an eye for an eye", which has repeatedly been proved not the way for diverse values to get along with each other. In this respect, human beings ought to humbly seek common points while reserving difference and strive to find utmost interactions of values. In terms of the establishment of the international order, China has thrown off the shackles of the mindset dominated by ideology and values. As the first-tier country got rid of the mindset after the Cold War, China reaped more diplomatic fruits accordingly. As for the west after the Cold War, many countries have emphasized consistently that countries should be classified in line with their values and ideology in terms of the international order. In the current international relations, it is several western countries rather than China that give priority to ideology. For western countries, ideology has been a mental load for their political

revolutions within and participation in the establishment of international order without. If the new international order still relies on one certain value to classify the world, it would set back the clock of history and have the world once again dominated by religious order, oriental order or western order.

The word "coexistence" defines that nations exist in harmony despite different ideologies or interests. In this case, it requires multilateral involvement. However, to dominate the world by a single ideology equals to unilateral monopoly. Objectively speaking, after the Second World War, the development of political science in the west encompasses the study of "coexistence", though it has never been the mainstream in the realm. For developing countries, the new order of the international politics and economy they've been pursuing refers to establish a platform where countries can share development fruits. The exploration of regional cooperation and integration also aims at building a regional community for them to share achievements. Dialogues between different civilizations are thriving with the goal to reach consensus in fundamental issues. China's "One Belt, One Road" initiative is under the guidance of "joint negotiation, construction and sharing". In this increasingly interconnected world, the hardest task before every country is to realize coexistence rather than confrontation.

Secondly, the future security of the international order depends on whether countries choose alliance and confrontation or cooperation and sharing. If alliance and confrontation predominate the logic of international security order, the international system would split into two or more confronting blocs, a historical tragedy of international relations within the western world. As the report reveals, if political civilization wants to strive forward, we must make breakthroughs in the ideology of either friend or foe. The international order is doomed to be incomplete if its premise is to amuse there is a real or potential enemy. There are many examples of zero-sum game in human history. For instance, the orthodox and heresy in religious order, the distinction between civilization and barbarian in both western and oriental order, the rival camps during the Cold War and the ideological trend of universal values after the war. Human being should realize that it would be a terrifying world where only a few countries/people are secure, for their security is based on others' insecurity. Therefore, the idea of common security raised by China and other developing countries is more logical than the idea of either alliance or confrontation in the evolution of the international order. In this respect, great powers in the word share the responsibility to avoid the international system being plagued by the Cold War idea of either alliance or confrontation and inhibit the way of developing military alliances

to establish the international order. The world has developed into a community with a common future and every country has to recognize the sovereign state system. Since every member in the international system shares a common destiny, they should reflect on colonialism, imperialism and hegemony of the past centuries to avoid division and confrontation within the international system and address the common security problems facing all countries.

In the interconnected world, to establish international security order, it's inappropriate to curtly classify a country or a state bloc as an enemy; it's absurd for liberal international order to deem "not free" states as a threat of the free world. The logic underneath is akin to that of the religious order during Middle Age when heretics were regarded as the threat to the religious order. John Rawls' theory concerning the international order has been put into practice and proven a threat towards sovereign international order. Countries that brazenly infringe sovereignty and territorial integrity of others are in fact enemies of the sovereign order represented by the UN. However, human being must realize that more countries should be involved to deal with complex problems. Nowadays, countries have closer ties with each other and should realize rather than those with different ideologies, their true enemies are extremism, terrorism, environmental problems, poverty, interventionism, hegemony and so on. When establishing the international order, China should strive to solve problem instead of seeking enemies. The international community should also learn from such attitude and correct its cognition towards the international order.

#### 2.Self-governance and Collegiality

In the interconnected world, domestic affairs of every country are more than ever exposed to the international politic realm. Conversely, international issues increasingly exert influence to domestic affairs. Nowadays, almost any country wouldn't be affected by the global political system. In the past, there was no need to take into account the interconnections of countries when establishing the international order, but nowadays when planning the international order, we must think about the general background. This report also discusses issues concerning selfgovernance and shared governance based on the theory of the interaction between the domestic order and international order.

Firstly, a bosom international order should render full respect and trust to sovereign countries that they enjoy the right of priority to solve their domestic affairs. International community should support and strengthen these countries rather than deny and negate their uniqueness of entity responsibility. All of these constitute the main points of the term "selfgovernance" that the report emphasizes. On the other hand, some issues are beyond national jurisdiction and requires proper disposition. If not, they may endanger the domestic order. To handle these issues, every country should cooperate and explore solutions through shared governance. It is exactly what the term "shared governance" the report refers to.

Secondly, issues within national jurisdiction should be reserved in domestic governance. But for issues not quite controversial but relating to interests of many countries, international organizations ought to play a role to help countries take concerted actions. The combination of selfgovernance and shared governance fully affirms sovereignty as the bottom line in the international order but also advocate the concept of sovereignty. In the interrelated world, sovereignty is still the basis of the international order and sovereign states are high interconnected. If people can't realize this reality, they can neither defend sovereignty against the external interventionism nor realize that outwardly transferring internal negative elements may jeopardize the domestic order of other countries. Furthermore, when handling problems ascending from domestic realm to the international politic system, countries should explore rules, programs, laws and international organization and take the path of shared governance. In this respect, both self-governance and shared governance are indispensable for the planning and construction of future international order. An orderly domestic system is based upon self-governance while an orderly international system is based upon shared governance. The combination of both forms a benign international order. In the interconnected world, people are in desperate need of fingering out a new political science encompassing the domestic and international politics by means of theory and practice.

Thirdly, this report holds that there is no conflict between the common rules for the international system and diversified domestic system. It also adheres to China's planning of the international order. Both the eastern and western order theorists entertain that a benign international order relies on stable domestic orders. But the difference is that rather than based on exactly the same domestic systems, China believes that a benign international order could be based on diversified domestic system. Countries can cooperate to seek share governance and coexistence while keeping their diversified self-governance in the international order.

#### 3. The general idea for the planning of the international order

This report lists four pillars of the international order as follows. Based on the four pillars, it further analyzes China's general ideas towards the planning and practice of the international order.

1. The power base. This report holds that the power structure is the material basis of the international order. The durability and flexibility of the international order should not only take into account the static nature but also the dynamic nature in the balance of power. Generally speaking, the domestic order is established upon the orderly succession of power. However, in the international order, systems for the orderly succession of power haven't come into being. Therefore, if the balance of power is broken, the stability of the international order would face severe tests. In an effective international order, a dynamic adjustment mechanism is of vital significance to balance the major power relations. By virtue of such mechanism, developed countries and emerging power can seek agreement while shelving differences rather than tear each other down. This report believes that although the emerging power might challenge the international order, the frustration of the developed world also risks the international order. In this regard, a new type of relationship between major countries is a powerful tool for the stable transformation of the international system and a big concern in the establishment of a new international order. Moreover, in spite of the importance of relationship between major countries, its stability may not lead to a sustainable international order. Experience shows that if great powers are acquiesced to interfere in internal affairs of small countries, some small countries would become puppets of great powers and the international system would slide into turbulence. Therefore, it is of equal importance to balance the relationship between great powers and small countries and create an orderly, harmonious climate for their coexistence.

2. The domestic order. After the Second World War, the greatest achievement in the evolution of the international order lies in the mutual recognition and insurance of state sovereignty between countries. The denial of sovereignty should never be the prerequisite for the reform and adjustment of the international order. Instead, the completion and development of sovereignty serve as the guidance during the reform and adjustment. This report realizes that after the Cold War, there emerged several ideological trends and campaigns deviating from the sovereignty order. The current planning of the international order must return to the sovereignty doctrine stipulated in the U.N. Charter. Under these circumstances, China plays a special role in upholding sovereignty. This report also believes that the extension of sovereignty of every country begins to overlap with each other in the interconnected world. Therefore, issues that obviously belong to the domestic administration should be reserved within self-governance. Every country is at different development stage and enjoys special national conditions. Their people should decide its domestic system and development road based on their own choice. The international community should constructively help every country improve its capacity of self-governance so that every country can continuously elevate its administration ability and sustain social stability, prosperity, fairness and justice. The international community should not push the regime change of a certain country responding to the appeals of universal values or pressures from great powers. It should also avoid military intervention. After the Cold War, the result of western intervention in some countries has fully demonstrated such actions wouldn't improve national governance of these countries but stimulate conflicts of their ethnic groups.

China can formulate domestic and abroad policies in three aspects as follows:

1)China should support its effective self-governance with the establishment of the international order. China should promote global economic and political stability and realize domestic economic transformation and upgrading at the stage of "New Normal".

2)China should take the lead and bring along the self-governance of other countries. China should set out from the "One Belt, One Road" initiative and coordinate its development strategies with those of countries along the Silk Route. In this way, China can share development achievements with these countries and promote their national governance.

3)China should use its achievements from effective self-governance to help other countries develop their self-governance. China has recently established several financial institutions to support international development. These institutions can improve China's supply of international public goods and its capability of coping with challenges such as poverty, environmental disruption, terrorism and armed conflicts. These institutions would also bring more higher-quality resources of governance to other countries and back up their development of selfgovernance.

3. The value criterion. In the interconnected and diversified world, it is pragmatic to replace universal values from certain civilization with shared values as the basis of the international order. There are core values every civilization or country. The values serve as a criterion to sustain its domestic order. Therefore, countries in the international community and influential international media shouldn't use their core values to negate or lash those of other civilizations/countries. They shouldn't set their core values as the benchmark and force other countries to follow, either. Otherwise, there would be endless clashes about values. However, to promote international cooperation, there is no denying that value criterion is still necessary in the interconnected world. This report holds that shared

values of a specific international order should concentrate on diversity, commonality and integrity. Values such as unity, coexistence, harmony, justice and sharing can reflect meanings to live in the international community. This report believes that although democracy, rule of law and human rights are components of shared values, their definition, significance and practice depends on specific national conditions. The promotion and maintenance of these values differ in each countries and mainly belong to the domestic order. Right now, these values trend to be parts of ideology and often face double standards in practice. In view of disputes, the international community should force other countries to put them into practice. However, since there are extremists tramping on human rights, the international community has the responsibility to formulate clearer criteria and discreetly exercise their right of enforcement intervention. For instance, in 2005 out of its "protective duty", the UN summit defined four types of offence: genocide, ethnic cleansing, war crimes and crimes against humanity.

4. The organization and mechanisms. The interconnected world witnesses common problems deriving from countries to the international realm. Effective international organizations and mechanisms have to be established to tackle these problems through global shared governance. This approach doesn't deny the priority of sovereignty or postpone the disposition of common problems.

This report affirms the significance of many international organizations and mechanisms in international shared governance after the Second World War. It also believes that since the world structure has changed, these organizations and mechanisms are faced with tremendous pressure to conduct reform. China wouldn't challenge the existing and wideaccepted international rules, because China itself is a key member of these rules. But China would actively renovate international rules and bring more innovative rules and proposes to the reform of the international order. Some countries flaunt the banner of "higher standards" to form exclusive trade blocks and even strengthen their military alliances, which hampers the coexistence, inclusiveness and openness in the international order. Facts are that these countries wouldn't play constructive roles in the establishment of future international order. Meanwhile, at the end of 2015, several international events showed signs of a better international order. In October, the International Monetary Fund announced that the Chinese currency the Yuan is eligible to join the Special Drawing Rights, or SDR basket. Yuan became the first currency from the emerging economies in the basket. In December, developed countries and developing countries finally reached an agreement in Climate Change Conference in Paris to tackle with global climate change. In the same month, US Congress passed the bill about the share reform of IMF which had been raised in 2010 but shelved for 5 years. In this case, some decision-making power would shift from developed countries to the emerging power. Although reforms would take long time, the revolution of international order appears to ahead in the right direction. As a pushing hand for the new consensus and reforms, China more than ever realizes its position in the international community and strives to play a greater part in the establishment of future international order.

Translator/Hua Zhiyun

### Strategic Comments and Suggestions on the Red-line State Policy of Ecological Protection in China under the New Normal

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Since the reform and opening up, with the rapid development of urbanization and industrialization, China has entered the economic transformation period with 6000-8000 dollars per capita GDP with total economic output almost ranking the second in the world. However, it faces the plight of resource constraint, serious environmental pollution and ecosystem degradation, bringing great challenge to the sustainable development. With the increasing intensity in the use of the nature, occupation and destruction of China's ecosystem has become severer, marking the change from structural damage to functional disorder.

In particular, the trend of grassland ecosystem degradation is quite obvious, while wetlands keep shrinking and ecosystem services declining. China's per capita arable land resources, forest resources, and grassland resources are about 39%, 23% and 46% respectively of the world average. Yet the new urbanization is the inevitable trend of China's future economic and social development and with the improvement of the urbanization rate, its resource environment pressure will further increase. Studies show that the reasonable carrying capacity of land resources in China is only about 1 billion and 150 million, which is now overloaded about 200 million. The red line of ecological protection is important to the construction of regional ecological security pattern, the protection of ecological system functions, the maintenance of biodiversity and sustainable economic and social development. Adapting the population distribution and economic layout to the carrying capacity of resource environment, and promoting the economical and intensive use of all kinds of resources are of great practical significance and far-reaching historical influence to maintain national ecological security and protect people's working and living conditions.

## The basic connotation and historical evolution of the "ecological protection red line"

The "red line" generally refers to the boundary line of land, also likened the impassable boundary, which was first seen in urban planning. With the deepening of the concept, the connotation of the "red line" also extends from the space constraint to the quantity and quality constraint, from the spatial planning to the elemental planning and management system. At present, the "red line" is usually a binding number of space

The ecological protection red line refers to the strict control boundary legally delineated in the key ecological function areas, ecological and environmental sensitive areas and fragile areas, which is also the bottom line of national and regional ecological security. It is important to the construction of regional ecological security pattern, the protection of ecological system functions, the maintenance of biodiversity and sustainable economic and social development. However, there are many problems in its implementation. This report is going to talk about it and provide some solutions.

and quantity, to indicate the boundary line, the control line or the bottom line of land. In the top-level design of ecological civilization, the Party Central Committee borrows the word "red line" to show the indestructible seriousness of the ecological environment protection. According to the *Technical Guidelines for the Delineation of Ecological Protection Red Line* by the Ministry of Environmental Protection, the red line refers to the strict control boundary legally delineated in the key ecological function areas, ecological and environmental sensitive areas and fragile areas, which is also the bottom line of national and regional ecological security. Areas surrounded by the red lines are ecological protection redline zones, which plays an important role in the construction of regional ecological security pattern, the protection of ecological system functions, the maintenance of biodiversity and sustainable economic and social development.

From the establishment of China's first natural reserve in 1956, and the identification of 50 important functional areas of ecological service in 2008, to the stipulation of national restricted and prohibited development zones in 2010, and the clear propose of drawing the red line in the *Opinions of the State Council on Strengthening the Key Environmental Protection Work* in 2011, we do see a widening range and a clearer target of China's ecological protection.

And the above-mentioned opinions also put forward clearly to draw red lines in the important ecological functional areas, land and marine ecological sensitive and fragile areas. It was the first time for China to raise the concept of "ecological protection red line" as well as the delineation task in the document of the State Council.

In 2015, the *Technical Guidelines for the Delineation of Ecological Protection Red Line* was issued after three years of theoretical and practical research. At present, in additional to the red line of cultivated land (1.8 billion mu), there are red lines of total water consumption, total energy consumption, total pollutants into the sea and so on, which indicate that China's economic and social development in many ways has been close to the limit of resource and environment, and the economic development has entered the new normal. The most direct test China now faces is whether or not it can hold the ecological protection red line.

#### Problems

First, the concept and connotation is not clear enough and the understanding is not unified. As the most important mechanism in the field of ecological protection and the focus of relevant research in China, the concept and connotation of ecological protection red line has not yet reached agreement. Though the views of domestic experts differ from

Name	Main content	
Red line of total water consumption	By 2030, the total national water consumption will be controlled within 700 billion m3.	
Red line of pollutant receiving in water functional areas	By 2030, the standard-reaching rate of the national water functional areas will be increased to over 95%.	
Red line of air pollution	By 2017, the inhalatable particle concentration of the country's prefecture-level and above-level cities will be decreased by 10% that of 2012.	
Red line of carbon emission	By 2020, carbon dioxide emissions per unit of GDP will be decreased by 40% to 45% that of 2005.	
Red line of cultivated land	By 2020, the red line China must hold will be 1 billion and 805 million, with the guarantee of both quantity and quality.	
Red line of wetland protection	By 2020, there are no less than 800 million mu of wetland.	
Red line of forest protection	Forest coverage rate reached 26%, while forest areas of no less than 3 billion and 733 million mu.	
Red line of total energy consumption	By 2015, the total national energy consumption will be about 4 billion tons of standard coal.	
Red line of total pollutants into the sea	By 2020, the standard rate of pollutant discharge into the marine ecological protection red-line area will reach 100%, while the total amount decreases by 10% to 15%.	

#### Table 1 the resource and environment red lines designated by the state

each other, Forestry Bureau, Ministry of Water Resources, Marine Bureau, Ministry of Environmental Protection and other different administrative government departments have designated their own red lines. Despite the official release of the Technical Guidelines for the Delineation of Ecological Protection Red Line, the red line drawn by China's Ministry of Environmental Protection is not the same with that of the Central Committee. Currently, there are many different versions of the red line in environmental protection, like ecological protection red line, environment red line, ecological environment red line, ecological environmental protection red line, ecological function baseline, the bottom line of environmental quality safety and so on. Which one is closer and more practical, still no answer.

Second, it lacks of coordination mechanism. On the state level, it lacks of unified decision-making as well as supervision and management system and mechanism, with institutional obstacles like functional mismatches, conflicts and overlapping of government departments, causing conflicts between national public interests and sector industry interests. The provisions of the state need the recognition of the local governments, yet the related interests of each local government sector bring challenges to the delineation of the red line. The current management system of the ecological environment is complex, with a great number of departments and levels and a decentralized management. Without systematical arrangement and overall planning of management strategies and policies, it is impossible to realize the coordination of the basic and technical standards. In addition, the lack of effective ecological compensation mechanism between ecological protection areas will bring troubles to the implementation and coordinated development. And there are contradictions between local economy and ecological protection, between the short-term development and the long-term interests.

Third, it lacks of certain standards. Thus it hinders practical application. The standard is hard to set because of various economic development, environment vulnerability, climate and geology of different regions, as well the dynamic environmental changes. What's more, the supporting role of environmental protection standards should be played in the delineation of the red line. Although China's current environmental protection standards has formed with the environmental quality standards and pollutant discharge standards as the core, and environmental monitoring standards, environmental basis standards and environmental management technology specification as the important components, with an environmental protection standard system composed both by the state and the local, there are still some problems, which mainly are the unbalanced support for different elements(such as soil, ecology, and other complex factors), and the incomprehensive support for the integrated ecosystem management; regional pertinence is not strong enough to support the classification management; and the system and coordination of the resource management standards need to be strengthened.

Forth, the legal system is imperfect. Reasonable and explicit legal system is the basis of ensuring the implementation of space control measures. As the institutional innovation of China's environmental protection ecological protection red line has become a major national policy, but the key of implementation is a perfect legal system. It involves many aspects of legislation, including land use planning, ecological protection, natural resources, pollution control, bio safety and so on, yet no current legislation in China has been clearly related to it, which can only enhance the importance of ecological space from a macro level. In addition, because of China's vast territory, and complex local situations, to make general laws and regulations is quite difficult. Therefore, only the local government promulgates local regulations according to its own situation, in order to strengthen the protection and implementation of the ecological space.

Fifth, it's hard to put into practice. All the above-mentioned problems result in the difficult implementation. From the Third Plenary Session of the 18th Central Committee of the Party, we do see many institutional innovations of ecological civilization, like the ecological protection red line, natural resource assets and liabilities, off-office auditing of natural resource assets, and lifelong accountability system for environmental damage, which reflect the country's deep concern on environmental protection. But how to avoid the red line becoming a "hanging line", and how to make the environmental evaluation of leading cadres work, such implementation after top-level design still need more innovation and bravery.

#### Suggestions

This report believes that to promote the ecological protection red line, following aspects should be focused:

First, strengthen the basic research, clarify the concept, improve relevant technology, and carry out further eco-environmental baseline survey to grasp the ecological matrix and thus make it real.

To find out the ecological matrix is not only the important basis for the delineation, but also the premise of the implementation. Current economic development may be affected, because of the most stringent protection after the set of the red line which, to a certain extent, may influence the local industrial structure and layout. Hence, relevant basic investigation should be conducted before the delineation, in order to make it more practical and reasonable, and to refine the boundary and the management afterwards. A clear definition, an unified understanding, an improved delineation technology, and a perfect related standard system are the key to make the research more pertinent, the departments more coordinated, the delineation more operational, and the protection more focused. Therefore, local eco-environmental baseline survey should be supported and promoted, while other relevant basic research deepened, to make clear what to do, and to determine how to do.

Second, strengthen management while establish a hierarchical management and monitoring system, an assessment system, and an

ecological view of political achievements, as well as an accountability system. Clarify the scope of the first-level and the second-level protection areas, as well as the management and reward system; implement the most stringent systems and regulations; establish a set of withdrawal compensation mechanism for the established enterprises in red-line areas to promote ecological protection through the interest leverage; establish a monitoring and management system to conduct regular survey on the ecological conditions, making full use of 3S technology and the remote monitoring system for land ecological security; strengthen the management of the red line, including the safeguard mechanism, assessment system, ecological compensation mechanism, ecological political achievements evaluation system, normalized ecological civilization propaganda and education and so on, bringing the resource consumption, environmental damage, ecological benefits and other indicators into the evaluation system of economic and social development thus making them an important orientation and constraint for the establishment of ecological civilization; establish an accountability system, those who cause serious consequences or bad influences to ecoenvironment shall be investigated and held accountable for a lifetime.

Third, accelerate the legislation, establish and perfect relevant laws and regulation system, and clarify its legal status, to provide legal support for the delineation. The authority and coerciveness of the red line should be reflected by means of the law. Environmental Protection Law is the basic law of the ecological civilization system construction. And in its revised version, the red line was, for the first time, written into the law, emphasizing that it is a compulsive regulation to protect eco-environment and prevent ecological risks, which confirmed its legal status. Local government or local legislation should make further delineation of red-line areas based on the national standard, and carry out more strict and specific implementation measures. Meanwhile, different standards and management measures should be made according to different areas, to conduct differentiated management and control; monitoring, supervision, management and accounting should be put into the construction of the regulatory system.

Forth, gradually establish inter-regional coordination mechanism, ecological compensation mechanism and public participation mechanism. The establishment of ecological compensation mechanism can play an important role in alleviating the contradiction between local economic and ecological protection, long-term interests and short-term development. Thus, compensation mechanism in the red-line areas should be gradually established to promote ecological protection in the compensated areas through the clarification of compensation measures, standards, funding sources and channels; increase financial transfer payments, explore more diversified pattern of ecological compensation and support areas with relatively fragile eco-environment; in areas with both specified contributors and beneficiaries, establish a lateral compensation mechanism among different areas, according to the principle who benefits who compensates.

In addition, public participation mechanism should be introduced into the maintenance of the red line. As the subject of the rights and obligations of eco-environmental protection, public should get involved in every part of the work, especially in the legislation and environmental impact assessment of the development activity. In the meantime, strengthen the propaganda and education of environmental protection and ecological security to the public, making them want to and able to participate in the delineation, implementation and protection of the red line.

In summary, it is imminent for China to promote and implement the delineation of ecological protection red line, no matter in consideration of the national strategy or the local major demand. There are abundant reference provided by domestic and foreign successful experience and case studies. Meanwhile, thorough studies on the concept, connotation, methods, challenges and management of the red line have been carried out by relevant domestic universities and research institutions in recent years, which will play an important role in the promotion. As a unique product of China, the ecological protection red line has not only Chinese characteristics but also demonstrative values, which requires urgent support. It is not a dotted line but a full line. Related special funds and projects should be set for further studies to accelerate the improvement of delineation technology and the implementation of the work.

Translator / Li Tianqi

## Inviting Contributions to China Watch 2016

To construct new-type think tanks, promote the conversion between research and policy-making advice, and provide more high-quality reports and advices, Fudan Development Institute and Centre for Think-tanks Research and Management in Shanghai decide to solicit contributions from Chinese and overseas scholars to *China Watch*. *China Watch* focuses on hot issues in various fields of China. In the first semimonthly, it selects the latest achievements of top foreign think tanks, themed by 'International Perspectives and Forefront Issues'; in the second one, it collects the policy analysis of Chinese experts, themed by 'Chinese Think Tanks and Contributions to Development'.

#### **Requirements**

1. This contribution should be policy analysis or advice, reflecting author's deep thinking of forwardlooking and comprehensive issues. Topics include but are not limited to Chinese domestic affairs, foreign policies, economy, society, education and other issues involving China's development.

2. The English edition could be articles published by foreign think tanks or major media in English (if the article is in other foreign language, please attach a 200-word abstract), or English research achievements of yourself. If the contribution is accepted by editorial department, it will be translated by the referrer or editorial department.

3. The Chinese edition is open to all the institutions and individuals. The topic is decided by yourself and the language should be succinct and not academic. 3000 words are proper, and there should be an introduction of the author within 100 words in the end. If the contribution is involved in sensitive issues, please burn it onto disc and post it to the editorial department with paper edition instead of sending it by email.

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1. Email address: centrems@fudan.edu.cn. Please fill the title of your contribution in the email subject and attach the following information (very important): Article, Author, Referrer, Address, Email, and Telephone Number.

2. One contribution at a time. Please not deliver more than one contribution at a time, or deliver repeatedly.

3. The contribution could be delivered to other publications and we'll reply in one month. If the contribution is accepted, the editorial department will reward it.

#### **Contact Information**

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# CHINA WATCH

# WATCH CHINA

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